DFAS Financial Systems

Strategic Plan

Foundation for the Future

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1. INTRODUCTION

1.1 Purpose

The Defense Finance and Accounting Service (DFAS) is the primary organization within the Department of Defense (DoD) responsible for performing and overseeing finance and accounting (F&A). DFAS has generated this plan, *DFAS Financial Systems Strategic Plan (DFAS FS-SP)*, to establish the strategic direction for migration, modernization, and integration of DFAS financial systems (also referred to as DFAS F&A systems). The Chief Financial Officers (CFO) Act of 1990 mandates that DoD improve financial management and reporting. The Federal Financial Management Improvement Act (FFMIA) of 1996 further mandates that agencies implement and maintain systems that comply substantially with Federal financial management systems requirements, applicable Federal accounting standards, and the U.S. Government Standard General Ledger (SGL). The financial management systems policy described in OMB Circular A-127, "Financial Management Systems," requires that each agency establish and maintain a single, integrated financial management system.

As defined in OMB Circular A-127, the term "single, integrated financial management system" means a unified set of financial systems and the financial portions of mixed systems encompassing the software, hardware, personnel, processes (manual and automated), procedures, controls and data necessary to carry out financial management functions, manage financial operations of the agency and report on the agency's financial status to central agencies, Congress and the public. Unified means that the systems are planned for and managed together, operated in an integrated fashion, and linked together electronically in an efficient and effective manner to provide agency-wide financial system support necessary to carry out the agency's mission and support the agency's financial management needs.

As defined in the FFMIA, the term "financial system" includes an information system, comprised of one or more applications, that is used for (a) collecting, processing, maintaining, transmitting, or reporting data about financial events; (b) supporting financial planning or budgeting activities; (c) accumulating and reporting cost information; or (d) supporting the preparation of financial statements.

It is within this context that this plan presents a common vision of an Objective CFO-compliant Environment (OCE) that satisfies FFMIA requirements and is consistent with the policies articulated in OMB Circulars A-123, A-127, and A-30. This plan further describes the DFAS implementation strategies to achieve the OCE – a single, unified, standards-based, shared information infrastructure known as the DFAS Corporate Information Infrastructure (DCII). The DCII constitutes the objective information infrastructure for the DFAS F&A mission.

The *DFAS FS-SP* is the blueprint for consolidating, modernizing, and integrating DFAS financial systems into the DCII. This plan defines a set of migration strategies and associated near-, mid-, and long-term objectives derived from top-level financial management strategic direction formulated at the DoD and Federal levels of the United States Government. Further, this plan embodies the spirit of 1990's legislation such as the CFO Act, Government Performance and Results Act (GPRA), the FFMIA, and the Information Technology Management Reform Act (ITMRA) by documenting the strategies for DFAS financial systems migration. Ultimately, the *DFAS FS-SP* provides DFAS managers a basis for performing intermediate and detailed systems migration planning, as well as a basis for assessing progress toward achieving strategic objectives.

1.2 Scope

The future DFAS financial system will be vastly different from today's legacy F&A systems. It will comprise an integrated environment, as described in Section 3.3, that encompasses operating facilities, corporate applications, common support applications, transactional reporting and analysis stores, developmental and operational tool repositories, and more. To achieve this, the strategic direction contained in this plan addresses:

1. Establishment and evolution of the OCE to include the DCII and its major components;
2. Consolidation, modernization, and integration of DFAS legacy F&A systems into the objective environment; and
3. Migration of non-DFAS feeder systems that interface with DFAS financial systems to enable accomplishment of the overall DoD financial services mission.

The plan addresses the ten-year period from FY99 to FY08 with near-term being the initial two-year period (FY99 and FY00), mid-term being the next four-year period (FY01 to FY04), and long-term being the last four-year period (FY05 to FY08). Collectively, the near and mid-terms address the same six-year period covered by the FY98 Defense Program Objective Memorandum (POM) budget. The long-term period includes out-years not yet addressed by the Defense Planning, Programming, and Budgeting System (PPBS) process.

Section One sets the context for the remainder of the document. It summarizes the document's purpose and scope and identifies relevant background information. It also addresses the mission, past achievements, guiding principles, relationship to DFAS mission goals and objectives, DoD financial management, DoD and Federal financial management requirements, and relationships to other planning efforts as part of an Agency integrated management process.

Sections Two and Three establish beginning and end points for DoD financial systems strategic planning. Section Two focuses on the reality of today's systems environment. It also provides a historical perspective leading to the current environment. Section Three focuses on the future, describing the objective environment from operational, system, and technical perspectives.

Section Four describes systems migration concepts that establish the basis for defining specific strategies that implement the migration concepts.

Section Five describes a set of strategies for establishing and evolving the OCE and for migrating DFAS financial systems and supporting services to the OCE. It also identifies, for each strategy, the near, mid, and long-term objectives to be achieved.

Appendices A through C contain acronyms, references, and summary descriptions of system migration strategy objectives.

1.3 Background

DFAS was activated in January 1991 to serve as the sole finance and accounting agency for the DoD. DFAS accounts for the worldwide operations and multi-disciplined appropriations of the DoD. Figure 1 summarizes the magnitude of the DFAS operation.

Since its activation, DFAS has pursued fast track management and consolidation of the 324 installation-level F&A systems acquired from the military departments and defense agencies. The Agency's initial focus was to consolidate operations and reduce the number of F&A systems. By the end of 1999, the number of critical DoD F&A systems has been reduced from 324 to 83. DFAS is pursuing a consolidation goal of reducing the remaining 83 systems to 30 or fewer systems by the end of 2005. To achieve an efficient OCE, the focus must now turn toward systems integration. The Agency has undertaken initiatives such as the DCII, the DFAS Corporate Database (DCD), and the DFAS Corporate Warehouse (DCW) to establish the OCE for DoD F&A.

DFAS is the world's largest finance and accounting operation!

Finance (Monthly)

- Disburses $24 billion in payments to people and business entities
- Disburses $3.35 billion in intergovernmental payments
- Processes 1.2 million invoices
- Issues 500 thousand savings bonds
- Makes 450 thousand travel payments
- Pays 122 thousand transportation bills
- Processes 2.6 thousand military retiree death cases

Accounting (Annually)

- Manages156 active DoD appropriations
- Manages 1,050 program accounts
- Manages 226 Treasury accounts
- Processes 100 million accounting transactions
- Manages $162 billion Investment Manager-Retirement Trust Fund
- Manages $222 billion Foreign Military Sales Trust Fund

Figure 1. DFAS Operation

The DCD provides a central single logical database in which all shared DFAS financial data will be stored and maintained for on-line transaction processing. The DCW provides a central information repository to support reporting, on-line analytical processing, and archival.

Although DFAS is responsible for the majority of DoD's F&A systems, DFAS is not responsible for all systems that accumulate and store financial data. Feeder systems belonging to Military Services and Other Agencies supporting functional areas such as acquisition, medical, logistics, and personnel originate and process a significant amount of financial data ultimately reported on financial statements produced by DFAS systems. Before DoD can produce auditable financial statements, these feeder systems must be modified to record, maintain, and manage financial data according to federal financial management requirements.

In 1996, DFAS established the Defense Accounting Systems (DAS) Program Management Office (PMO) to plan and manage the consolidation, modernization, and integration of DFAS F&A systems. Since inception, the DAS PMO evolved to become the DFAS System Integration Directorate (DFAS HQ/I). Under the direction of the Under Secretary Defense (USD) (Comptroller), DFAS Director, and in collaboration with the other DFAS Directorates, DFAS HQ/I plans and manages consolidation, modernization, and integration of DoD F&A systems.

In 1992, DoD created the Defense Information Infrastructure (DII) to unify all DoD systems through a common structure built upon the DII Common Operating Environment (COE). In addition, DoD mandated use of the Joint Technical Architecture (JTA), specifying technical standards for systems development.

1.4 Summary of Requirements

The decade of the 90's produced a revolution of Federal legislation and DoD initiatives depicted in Figure 2 and summarized below.

National Defense Authorization Act of 1990. Requires fixed appropriation accounts to be closed after five years and any remaining balances canceled. It also eliminated "M" or merger-year appropriations. Implementing the "M" account legislation revealed a long-standing problem of unmatched disbursements.

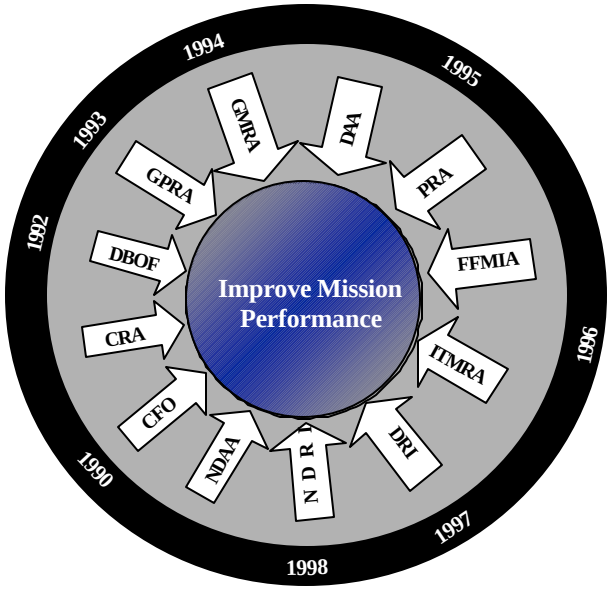

Figure 2. 1990's Legislation

Chief Financial Officers (CFO) Act of 1990. Requires DoD and other major agencies to improve financial management and reporting. It also requires each major agency to have a Chief Financial Officer to oversee its financial management operations.

Credit Reform Act of 1990. Results in more accurately measuring costs of Federal credit programs, places credit program costs on a budgetary basis equivalent to other Federal spending, encourages delivery of benefits in forms appropriate to beneficiaries' needs, and improves resource allocation among credit programs.

Defense Business Operating Fund (DBOF). Established in 1992 to increase cost awareness among decision-makers. It moved designated business activities (e.g., commissaries, depot maintenance, financial operations) into a business-like environment. Under DBOF, business activities modified their business practices to capture total costs and include depreciation in the price of products and services. In FY93, DoD conducted a comprehensive review of the DBOF process in order to standardize business practices, financial processes, and improve systems for business activities. DBOF is now known as the Defense Working Capital Fund (DWCF).

Government Performance and Results Act (GPRA) of 1993. Holds major agencies accountable for achieving program results. It focuses government organizations on results, service quality, and customer

satisfaction. The GPRA requires each agency to prepare a multi-year strategic plan supported by an annual performance plan for each major project. It also requires the generation of annual performance reports relative to planned performance objectives.

Government Management Reform Act (GMRA) of 1994. Expands CFO Act requirements by mandating establishment and use of consistent financial reporting principles, standards, and requirements. It also simplifies financial management reporting and requires annual financial statements to be audited by an independent organization.

DoD Appropriations Act of 1995. Requires DoD to validate that obligations exist prior to disbursing any single expenditure in excess of $5 million dollars. The FY97 Appropriations Bill lowered the prevalidation requirements to $3 million dollars.

Paperwork Reduction Act (PRA) of 1995. Minimizes the paperwork burden for individuals and requires uniform Federal Information Resource Management policies and practices.

Federal Financial Management Improvement Act (FFMIA) of 1996. Mandates that agencies implement and maintain systems that comply substantially with the Federal financial management systems requirements, applicable Federal accounting standards, and the U.S. Government Standard General Ledger (SGL) at the transaction level.

Information Technology Management Reform Act (ITMRA) of 1996. Requires each Executive Agency to have a Chief Information Officer (CIO) to oversee Agency ITM. It requires: better planning and managing of IT; analyzing, tracking and evaluating the risks/benefits associated with IT investments; annual reporting on net program performance benefits relative to Agency goals; managing of information systems relative to performance-based and results-based objectives; developing, maintaining, and facilitating a sound and integrated IT architecture; and standardizing IT policy. Business processes are to be appropriately reengineered before making significant investments in IT.

Defense Reform Initiative of 1997. Establishes the Defense Management Council to provide DoD oversight, including negotiation of performance contracts with DoD Agencies.

National Defense Reform Initiative of 1998. Requires DoD to create the Biennial Financial Management Improvement Plan (BFMIP) to address all aspects of DoD financial management and describes the proposed concept for managing financial operations.

1.5 Mission

In 1996, The Chairman of the Joint Chiefs of Staff (JCS) issued *Joint Vision 2010* to conceptually depict how DoD will channel the vitality and innovation of its people and leverage technological opportunities to achieve new levels of effectiveness in joint warfighting. *Joint Vision 2010* emphasizes that jointness is imperative to the success of future military operations. To achieve the required level of integration, DoD must be fully joint – institutionally, organizationally, functionally, and technically. This emphasis on joint operation includes the Department's financial management operations spanning all levels and organizations of the DoD enterprise. Deployed forces increasingly rely on sustaining base support to perform assigned missions, including support provided by the Department's financial management systems. The Department must provide warfighters with necessary financial services to sustain all peacetime, crisis, and wartime operations for effective decision making and morale maintenance. It is through DoD systems integration and unification strategies such as DII, Global Command and Control System (GCCS), and the Global Combat Support System (GCSS) that *Joint Vision 2010* is becoming a reality. In support of our warfighters, the DFAS mission stated in the *DFAS 1999 Strategic Plan* is to:

"Provide effective and efficient financial information, accounting, and payment services to the Department of Defense during times of peace and conflict."

Migration to an efficient and effective OCE will lower the costs of providing financial services to the warfighter, allowing these savings to be applied to modernization or maintenance of America's operational forces. This emphasis on providing greater services at less cost leads to the subordinate mission statement for this plan:

"Consolidate, modernize, and integrate the Department's finance and accounting systems to enable accomplishment of the DFAS mission."

1. ***Quality Customer Services.*** The Department's F&A systems shall focus on providing quality customer services in a timely manner.
2. ***Integrated, Standard Systems.*** The Department must have integrated F&A systems that comply with applicable accounting principles, standards, and internal control requirements.
3. ***Robust Information Environment.*** The Department's F&A systems must evolve into a robust information environment built on efficient, standard, shared information systems.
4. ***Reliable, Flexible, Scalable, Interoperable, and Secure. Operations.*** DFAS data, products, and services shall be sufficiently reliable, flexible, scalable, interoperable, and secure.
5. ***DFAS Corporate Data Environment.*** DFAS data is a corporate asset and shall be physically separated from applications, consolidated, and stored in the DCD and DCW, accessible to all authorized applications.
6. ***Standards-Based Architecture.*** The Department's F&A systems shall follow a single, integrated, open systems standards-based architecture, and shall be compliant with DII COE, JTA, DoD Finance and Accounting Data Model (DFADM), and the Defense Data Dictionary System (DDDS).
7. ***Stewardship Accountability.*** Designated stewards shall be responsible for data, applications, and infrastructure components.
8. ***Single Entry of Data.*** Data shall be entered only once, at the source, with known and acceptable quality.
9. ***User Friendly Interface.*** User interfaces shall be easy-to-use and consistent across DFAS applications.
10. ***Maximum Reuse.*** Corporate modules shall be reused whenever possible.
11. ***Rapid Technology Insertion.*** DFAS systems and applications shall be designed such that components can be rapidly replaced for technology upgrade or scalability purposes.
12. ***Compliance.*** Computing and information activities shall be conducted in a responsible manner, complying with applicable laws, orders, and regulations.

Figure 3. DoD Financial Systems Strategic Plan Guiding Principles

1.6 Guiding Principles

The guiding principles for this Financial Systems Strategic Plan, as listed in Figure 3, are derived from the Agency's guiding principles.

1.7 Relationship to DFAS Mission Goals

The current *DFAS Strategy* establishes the seven goals shown in Figure 4 for the Agency. This strategic plan has a direct relationship with Goals 1, 2, 3, 4, and 7. To achieve Goals 1, 3, and 7, DFAS F&A systems must: maintain quality financial information with appropriate controls; comply with system requirements provisions under the FFMIA; produce auditable financial statements; and produce timely, accurate, and complete accounting reports. To achieve Goals 2 and 4, DFAS F&A systems must evolve and migrate into the objective information infrastructure. This includes: defining and implementing sound, integrated target architectures; continuing system consolidation, modernization, and integration efforts; implementing the DCII; reengineering F&A processes; defining and applying standards; and using common building blocks to implement operational capabilities. Achieving these goals serves

Goal 1. *Improve the delivery, timeliness, and accuracy of finance and accountina services.*

Goal 2. *Leverage technology and change processes to improve performance and reduce cost.*

Goal 3. *Ensure financial information is timely, useful, and responsive to customers for decision-makina.*

Goal 4. *Develop and deliver creative solutions to serve our customers' needs and exceed their expectations.*

Goal 5. *Ensure employees are well-trained, equipped, and adaptable to change in an organization inspired by trust, open communication, and teamwork.*

Goal 6. *Create an environment that fosters and rewards extraordinary contributions.*

Goal 7. *Maintain an aggressive internal control program to ensure proper stewardship of DoD resources.*

Figure 4. DFAS Mission Goals

as an enabler for DFAS to achieve the other goals.

1.8 Management Concept

The DFAS management process provides visibility of budgets and expenditures to managers at all levels. The cost of F&A, now visible in the DoD budget, is steadily decreasing. DFAS funds all system initiatives as line item budget requirements in the DWCF budget. Each system initiative budgets for system changes by type (e.g., mandatory, CFO deficiency, functional user requirements, technical upgrades). System specific cost account codes track actual costs against budgeted line items.

The decision making process proceeds according to requirements in the GPRA and the ITMRA. This ensures investments based on sound business decisions, the conduct of business process reengineering (BPR), and initiatives that directly support national policy. The DFAS management process ensures a clearly defined hierarchical relationship and linkage between national policy and DoD strategic vision; the Agency's Strategic Plan vision, goals and objectives; and at the next lower level, the DFAS Financial Systems Strategic Plan goals, objectives, migration strategies and specific initiatives. A standard work break down structure is used to manage system initiative schedules through design, development and implementation. Standard templates capture the baseline, current cost, budget and savings to track cost and benefit objectives. Risk areas are identified and appropriate risk mitigation actions are incorporated into management plans. The Automated Strategic Business Plan (ASBP) tool captures schedule, cost, and dependencies among system initiatives. Performance measures are established for each system initiative, consistent with planning strategies and objectives.

To be fully effective, DFAS financial systems strategic planning must be part of an integrated enterprise management process integrated with other critical processes (i.e., strategic mission management, capital planning and budgeting, and operations and project management). The management process and tools must provide the capability to ensure that initiatives are funded, prioritized, and executed consistent with strategic and operational plans and the Program Objective Memorandum. Further, the management process will also be used to instill greater discipline into selection and implementation of initiatives by holding program managers accountable for cost, schedule and performance objectives.

1.9 Financial Management Reform

Financial Management Reform within DoD is critical. The National Defense Authorization Act of 1998 directed that DoD prepare and submit a BFMIP to Congress each even-numbered year. The BFMIP became the Financial Management Improvement Plan (FMIP) in March 1999. The FMIP is now an annual submission and acts as the USD(C) strategic plan. This plan, the *DFAS FS-SP*, reflects the strategic direction contained in the FMIP.

To achieve meaningful financial management reform, consensus and collaboration with the organizations originating financial transactions is necessary. Few financial management solutions rest exclusively with the financial management community. Changes in DoD financial management invariably entail changes in the business practices and financial management within Military Services, Defense Agencies, and functional groups (e.g., personnel, medical, logistics, acquisition). This demands an unusual degree of consensus building and collaboration. While these requirements may slow the pace of change, there are no viable shortcuts to achieve this meaningful change.

Partnerships with Military Services and Defense Agencies that own feeders systems are critical. These non-DFAS systems provide most of the data required to produce financial statements and to support other business areas, including logistics, personnel, inventory, and medical. The Military Services and Defense agencies are responsible for identifying those feeder systems critical to financial management and modifying them to become compliant with CFO and FFMIA mandated requirements.

1.10 Relationship to Other Planning Efforts

The *DFAS FS-SP* is part of the enterprise planning structure depicted in Figure 5. This plan, developed by DFAS for the USD (C), is applied at the DoD level. This plan builds on the guidance provided by Federal and DoD level strategic planning activities, as well as the DFAS 1999 Strategic Plan.

The *DFAS FS-SP* has a critical relationship with the *FMIP*, the *DCII Master Plan*, the *DFAS ITM Strategic Plan*, and the *DFAS Systems Integration and Implementation Plan*. The *DFAS FS-SP* provides a system-centric perspective that focuses on the

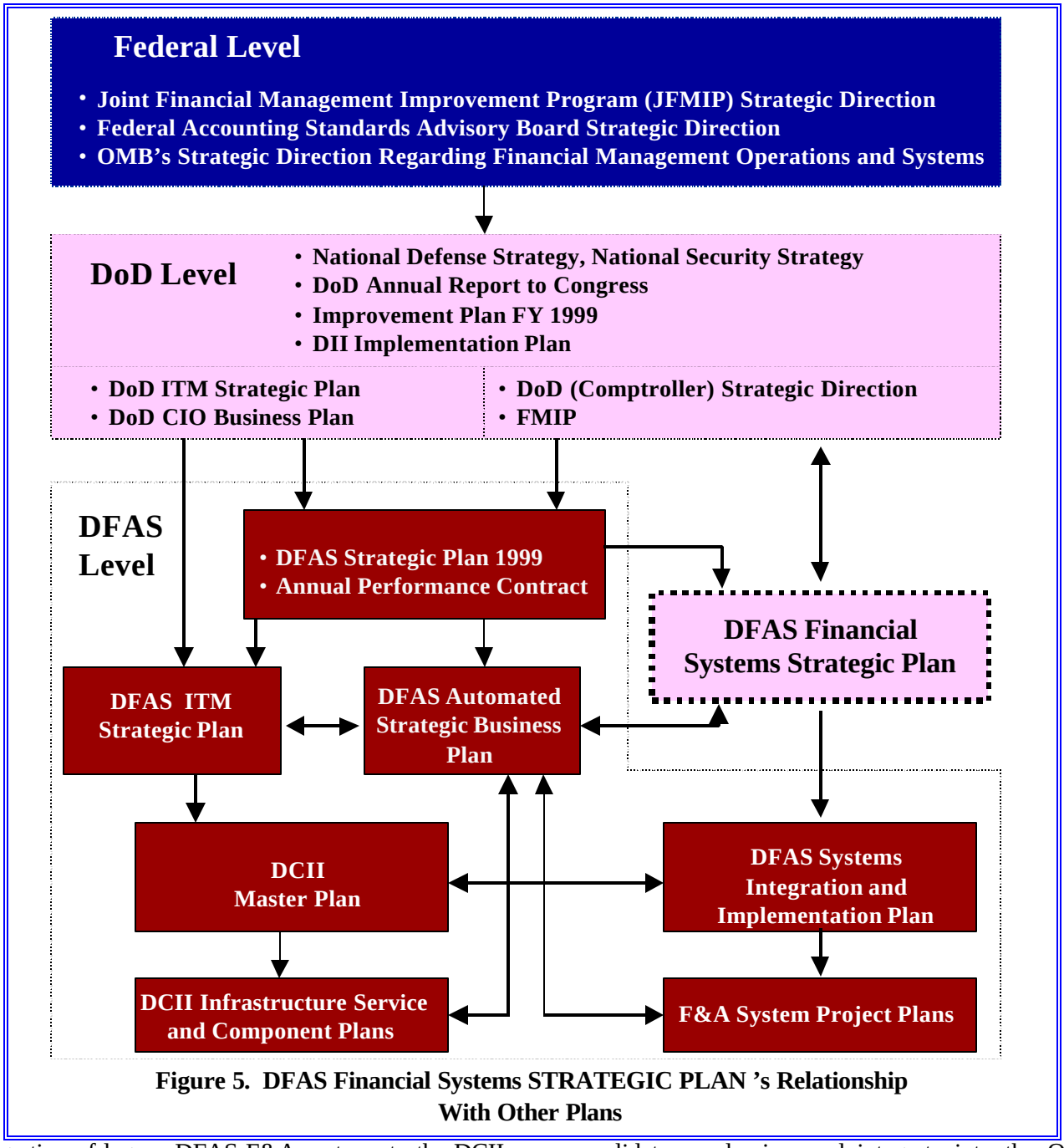

Figure 5. DFAS Financial Systems STRATEGIC PLAN 's Relationship With Other Plans

migration of legacy DFAS F&A systems to the DCII. From an enterprise perspective, the *DCII Master Plan* focuses on DCII establishment and evolution. The *DFAS ITM Strategic Plan* provides a CIO perspective focusing on the migration of DFAS systems and technical services to the objective information infrastructure. The *DFAS Systems Integration and Implementation Plan* is an intermediate-level plan that describes how the DFAS F&A systems will consolidate, modernize, and integrate into the OCE according to the strategic direction contained in the *DFAS FS-SP*. Similarly, DCII infrastructure service and component plans are subordinate to the *DCII Master Plan*.

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2. MIGRATION TO CURRENT ENVIRONMENT

In December 1992, DFAS assumed responsibility for all F&A operations, 338 associated nationwide F&A installation offices, and the charter to consolidate operations. As of mid-1998, DFAS consisted of a headquarters located in Arlington, Virginia, with five centers located in Cleveland, Ohio; Columbus, Ohio; Denver, Colorado; Indianapolis, Indiana; and Kansas City, Missouri; and 19 Operating Locations (OPLOCs) located nationwide.

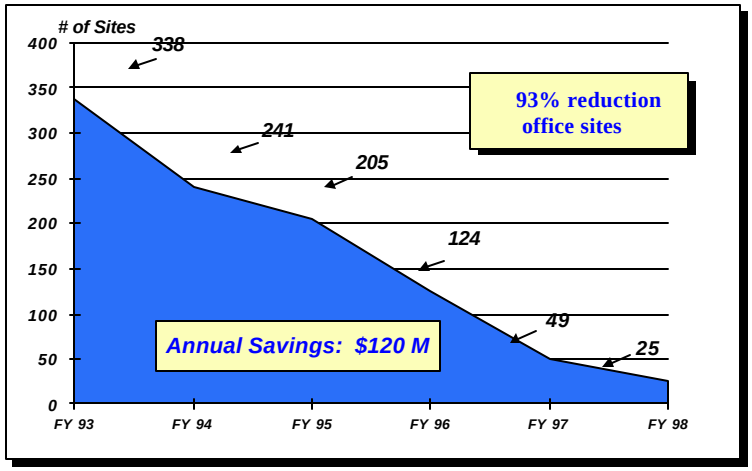

Figure 6. Operations Consolidation

2.1 Operations Consolidation

Since activation, DFAS has focused on consolidation. Figure 6 depicts operations consolidation, with a 93 percent reduction and an annual savings of $120 million through FY98. As operations consolidation completes, the focus now shifts to systems consolidation, modernization, and integration. This new focus will facilitate the transition and achievement of the next savings levels.

Concurrent with operations consolidation, the Agency has been consolidating systems. Figure 7 depicts actual systems consolidation from FY91 to FY99 and the projected systems consolidation through FY05. It shows a cumulative 71 percent reduction as of FY99, with a goal of 91 percent consolidation by FY05.

	FY91	FY93	FY95	FY97	FY99	FY01	FY03	Target FY05
Accounting	197	176	164	122	79	61	28	22
Finance	127	102	192	34	15	14	9	8
Total	324	278	256	156	94	75	37	30
Reduction (Cumulative)		46	68	168	230	249	287	294
Percent Reduction (Cumulative)		14%	21%	52%	71%	77%	89%	91%

Figure 7. System Consolidation

2.2 Systems Migration

Complying with DoD guidance, DFAS designated migration systems for F&A business areas. All other DFAS F&A systems will be replaced by the designated migration systems. The *DFAS System Baseline* document schedules DFAS migration systems consolidation by business area. Table 1 lists the DFAS F&A migration systems by business area.

Table 1. Finance and Accounting Business Areas and Associated Migration Systems

Business Areas	DCD Functional Partition	Mission Support Area (MSA)	Migration System
FINANCE	Entitlement	Military Pay	Defense Integrated Military Human Resources System (DIMHRS)
		Travel Pay	Defense Travel System (DTS)
		Retired Pay	Defense Retiree and Annuitant Pay System (DRAS)
		Transportation Pay	Defense Transportation Payment System (DTRS)
		Contractor/Vendor Pay	Defense Procurement Payment System (DPPS)
		Civilian Pay	Defense Civilian Payroll System (DCPS)
	Disbursing	Disbursing	Defense Standard Disbursing System (DSDS)
ACCOUNTING	Accounting	Debt Management	Defense Debt Management System (DDMS)
		Business Fund/ Defense Working Capital Fund (DWCF)	Industrial Fund Accounting System (IFAS-COTS)
			Defense Working Capital Accounting System (DWAS)
			Standard Industrial Fund (SIFS)
			Material Financial Control System (MFCS)
			Standard Material Accounting System (SMAS)
			Commodity Command Standard System (CCSS)
			Military Sealift Command – Financial Management System (MSC-FMS)
			Defense Logistics Agency Enterprise Resource Plan (DLA ERP)
			Defense Industrial Financial Management System (DIFMS)
			Columbus Working Capital Fund (CO WCF)
		General Fund Accounting	Fuel Automated System (FAS)
			Defense Joint Accounting System (DJAS)*
			General Accounting and Finance System – Reengineered (GAFS-R)*
			Standard Accounting, Budgeting, and Reporting System (SABRS)
			Standard Accounting and Reporting System (STARS)
			Program Budget Accounting System-Funds Distribution (PBAS-FD)
			DFAS Corporate Database (DCD)
		Trust Fund Accounting	Trust Fund (TRFND)
		Non-Appropriated Funds Accounting	Non-Appropriated Fund (NAF)
		Security Assistance	Defense Integrated Financial System for FMS – Reengineered (DIFS-R)
	Information Retrieval and Reporting	Departmental Reporting	Defense Departmental Reporting System (DDRS)
		Cash Accountability	Defense Cash Accountability System (DCAS)

* Note: DJAS and GAFS-R also support DWCF accounting portion of the Transportation business area.

2.3 Characteristics of Current Environment

DoD's organizational structure in previous years did not support cross-community functionality or information exchange. Each Military Service and Defense Agency developed its own processes and business practices. As DoD military strategy shifted from service-specific operations to joint operations, the sharing of financial and other information became imperative. Moving DoD to a standard set of F&A business processes across all communities is an arduous process, as hundreds of systems and thousands of people are involved. This evolutionary process requires strong leadership and extensive collaboration among the stakeholders. Under the guidance of USD (C), DFAS provides the required leadership, including establishing the strategic direction for DoD financial management systems.

Today, data management at a DoD enterprise level does not exist. Therefore, many systems cannot share data. Systems that do share data often provide incomplete and inaccurate financial information due to incompatibility of systems and lack of standardization. Often, quality of the source data is degraded because the data: 1) is incorrect, 2) is incomplete, 3) lacks precision, and/or 4) is not sufficiently current.

Interfaces between DoD financial management systems currently include real-time, electronic, and manual information exchange. The optimal system interface is real-time, where there is single entry of source data into a shared database, immediately available to all who need it. However, in today's environment, most system interfaces are not real-time. In fact, most interfaces are either electronic batch file transfers or manual involving data re-entry from hardcopy. Current processes are slow and susceptible to errors. In many cases, mechanical intervention and the use of hardcopy information, such as faxing forms and manual entry, are necessary to satisfy interface needs.

The difficulty of sharing information among financial management systems, the lack of standard F&A processes and practices, and the weakness of internal controls are at the root of multiple problems, including: (1) problem disbursements, (2) unauditable financial statements, (3) degraded data, (4) multiple data entry, (5) multiple instances of the same data, (6) duplicate system interfaces maintained, (7) delays in obtaining data, (8) manual reconciliation, and (9) the inability to trace transactions to source data.

Congress has enacted legislation that establishes time requirements for prompt payment, with penalties for late payment. Limitations of existing F&A processes and support systems preclude 100 percent validation of disbursements with the corresponding obligations prior to disbursing funds. Although the goal is to eliminate problem disbursement, the reality of the current environment requires balancing the trade-off between the cost to the government in penalties due to late payments versus the potential loss to the government due to invalid payments (e.g., over payment, fraudulent payments).

Although required by legislation, DFAS is presently unable to produce auditable financial statements. This situation will continue until feeder systems belonging to the Military Services and Defense Agencies are modernized, inventory problems are corrected, stronger internal controls are implemented, and standard F&A processes and practices are used throughout DoD.

Figure 8 illustrates an environment that will result if the DCII implementation strategy is not pursued. It graphically depicts many standalone systems operating independently of each other that will: 1) perform duplicative functions, 2) require unique or manual interfaces, and 3) fail to achieve the OCE vision.

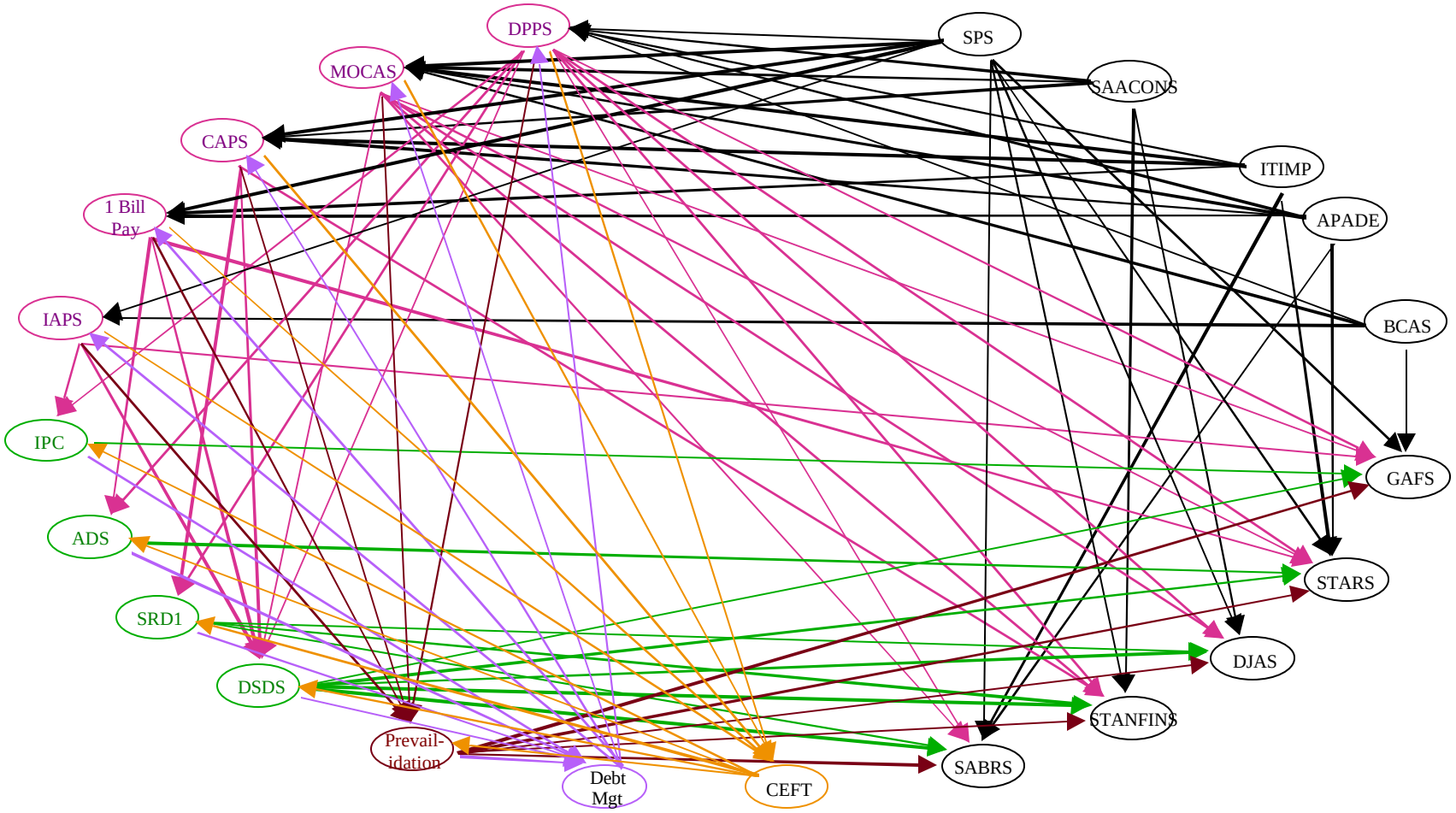

Figure 8. Standalone Operating Environment

3. OBJECTIVE ENVIRONMENT

The DFAS enterprise comprises multiple components, all focused on providing functional capability within identified business areas, which respond to customer domains.

DFAS HQ/I has the charter to establish and manage actions to achieve the DFAS target architecture. These actions include establishing a uniform financial system architecture that facilitates efficient consolidation of legacy systems, defining and planning the DCII, and laying the foundation for achieving the OCE.

This and subsequent sections focus on identifying and describing an integrated series of processes, applications, and systems operating within a DII COE-compliant DCII umbrella that will constitute the objective environment. This objective environment and its associated architecture are the template for reviewing, prioritizing, and approving new and existing initiatives.

3.1 Standard Business Areas and Functions

Table 1 in Section 2.2 identifies standard F&A business areas and associated Mission Support Areas (MSAs). Table 2 identifies standard F&A functional categories, as extracted from *A Guide to Federal Requirements for Financial Management Systems*, also known as the "Blue Book."

The OCE focuses on establishing a single, standard application for each MSA or unique business area. Processes required to support business areas or customer unique financial management requirements that cannot be standardized will be incorporated into the OCE as separate procedures or applications. These applications, both standard and unique, will use a shared data environment to update and retrieve data required by other applications. This approach eliminates storage of redundant data and the associated inefficiencies and reconciliation processes that result when data passes back and forth between applications. The standard processes and data elements will be implemented under the DFAS DCII initiative. The following summarizes standard F&A functions implemented by the applications:

- General Ledger – the highest level of summarization within the system which provides financial accountability for budgetary resources, stewardship over assets, tracking of cash/fund resources, and control of costs.
- Financial Reporting – the culmination of processes that initiate, record, classify, and summarize an agency's financial transactions to support: management's fiduciary role, budget formulation and execution, fiscal management of program delivery and decision-making, and internal and external reporting requirements.
- Property, Plant and Equipment (PP&E) – accountability mechanisms to maintain visibility, manage, and report (e.g., prepare general ledger balances) on DoD's PP&E holdings.
- Inventory – supports inventory accountability for: historical cost or methods which approximate historical costs; or last acquisition costing, wherein inventory is periodically revalued to recognize unrealized holding gains/losses which result from changing prices.
- Revenue and Accounts Receivable – activities related to recording financing sources, amounts due from others as a result of providing goods and services, billing and receivables collection.
- Managerial Cost Accounting – supports measurement of the full cost of DoD programs, operations, products, and activities.

Table 2. Standard Finance and Accounting Functional Categories

General Ledger	Financial Reporting
Property, Plant, and Equipment	Inventory, Operating Materials and Supplies, Stockpile Materials
Revenue and Accounts Receivable	Managerial Cost Accounting
Personnel/Payroll	Fund Control and Budgetary Accounting
Accounts Payable (Payment Management)	Travel
Direct Loans	Guaranteed Loans
Grants	System Controls and Audit Trails
Seized Assets	

- Personnel/Payroll – under appropriate internal control, supports complete, accurate, and prompt employee pay with timely access to all personnel/payroll records and transactions.
- Funds Control and Budgetary Accounting – supports agency compliance with Congressional spending mandates, records transactions affecting resource usage accounts, and provides information on actual obligations, outlays, and budgetary resources.
- Accounts Payable – supports activities related to payables establishment and funds disbursal to liquidate payables/liabilities.
- Travel – supports the processing, control, and reporting on employee travel.
- Direct Loans – supports the recognition, cost tracking, and management of direct loan portfolios.
- Guaranteed Loans – supports the recognition, cost tracking, and management of outstanding guaranteed loans as liabilities.
- Grants – supports determinations of grantees' eligibility, execution of grant agreements, awarding of funds, and administration of grants.
- Audit Trails and System Controls – supports the documentation and reporting of transactions from their inception to final disposition. This includes forward tracing from source documents of financial events to general ledger account balances and financial reports/statements, and vice versa.
- Seized Assets – supports tracking seized asset status, from time of seizure to final disposition.

3.2 Business Processes – Operational Perspective

As stated in the *1998 DFAS STRATEGIC PLAN* , "to achieve meaningful financial management reform, consensus and collaboration at every step is needed with the organizations originating transactions." Successful system evolution to the OCE, as depicted in Figure 9, is the product of planning and processes executed at multiple levels.

The DFAS objectives for use of business processes in strategic planning and system implementation comprise:

- Efficient, streamlined, reengineered financial management processes performed uniformly throughout the financial management community;
- Investment Management with standard functional and technical evaluation criteria, including cost as a constraint, to compare alternatives and identify potential savings and benefits;
- Life Cycle Management principles and discipline in the development and deployment of system initiatives;
- In Process Reviews and Financial Management Reviews at least semi-annually to review progress of system initiatives;
- Identification of system initiatives in the Program Objective Memorandum and Defense Working Capital Fund as capital budget investments;
- Strategic business planning, as part of an integrated management process, to establish the broad thrust of DFAS initiatives; and
- System implementation planning to ensure that development activities and resulting applications translate program events into auditable accounting transactions.

These processes are designed to minimize development, deployment, and operational risks (e.g., through identification and correction of deviations as

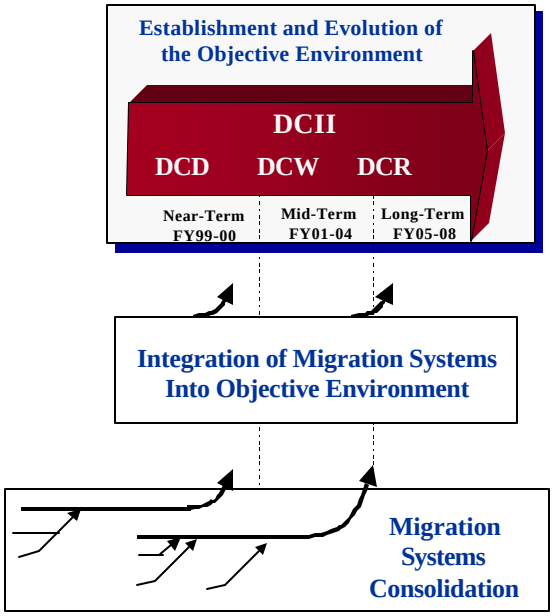

Figure 9. Multi-level Evolution

early as possible) and to maximize return on investment (ROI) in terms of savings and benefits to the DoD. Having project and functional managers working in partnership to manage financial information necessary to perform the Defense financial services mission will result in:

- DoD financial management in line with financial management best practices implemented in the private sector and other Federal agencies;
- Financial management system compliance with rules, regulations, and guidelines imposed by Congressional, Federal, and DoD leaders;
- Military Service and Defense Agency feeder systems in which all financial data are properly recorded, data integrity are maintained, and reliable audit trails are developed; and
- Reduced fraud, waste, and abuse.

3.3 The Objective CFO Environment – System Perspective

The DFAS, in conjunction with multiple organizations, is implementing its part of the integrated financial system depicted in Figure 10. DFAS is responsible for implementing the framework that will accommodate the effective and efficient migration and interface of legacy and migration financial systems into the DCII. DFAS recognizes that successful achievement of the OCE requires more than the architecture depicted in the figure. Therefore, the DCII comprises operating facilities; corporate applications; common support applications; transactional data stores; reporting and analysis data stores; developmental and operational tool repositories; communications facilities; and the policies, procedures, principles, and guidelines that govern them. Thus, the DCII is an integrated collection of systems, procedures, policies, and standards to provide the following capabilities:

- Centralized Management of Transactional Data,
- Centralized Management of Analysis and Reporting Data,
- Central Development, Maintenance, and Operation Repository,
- Legacy, Non-Standard, and Proprietary Data Access,

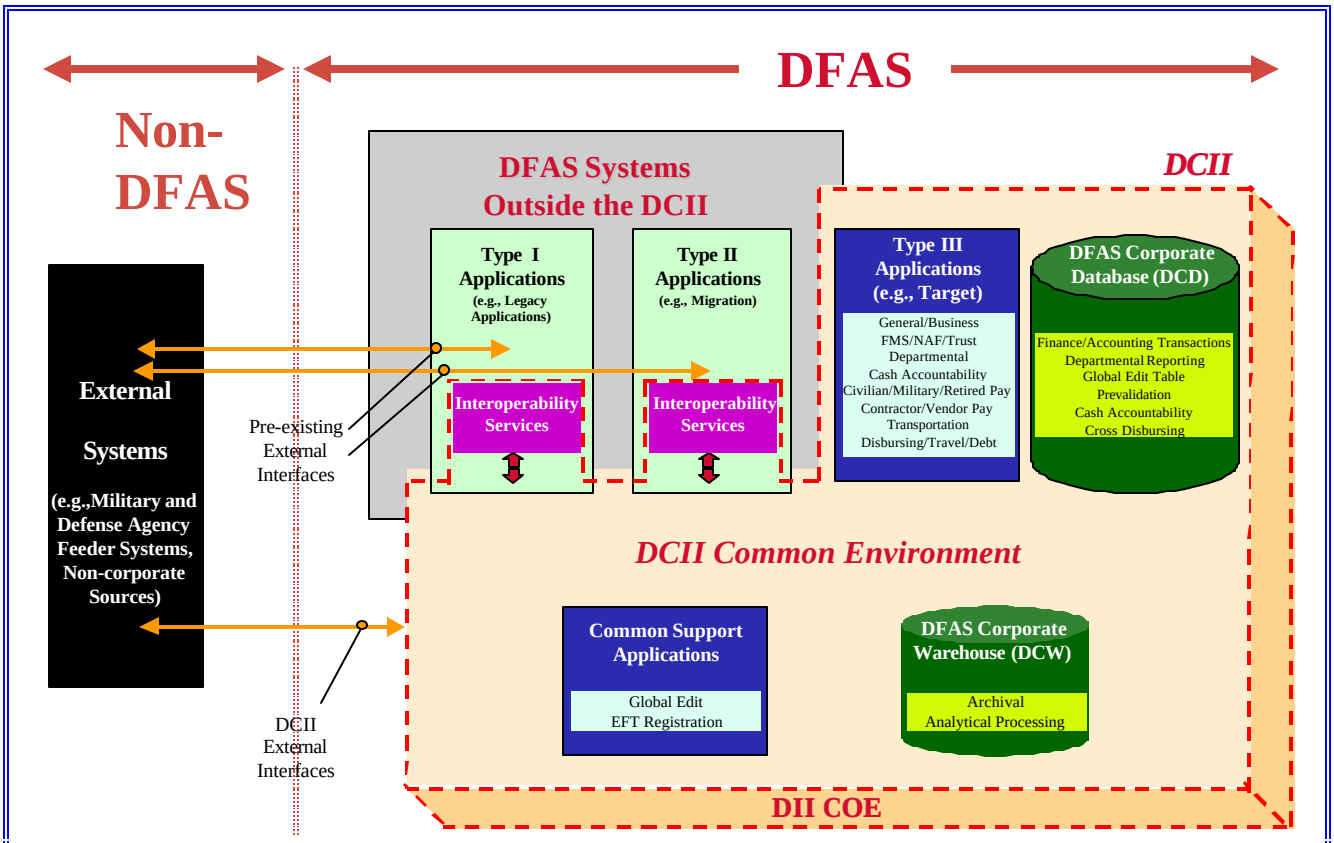

Figure 10. OCE - System Perspective

- Data Transfer,
- Messaging,
- Security,
- Distributed Processing,
- Translation and Data Cross-Walk,
- Hardware and Software Applications, and
- Common Support Applications.

Figure 10 depicts three types of applications. All DFAS applications, other than common support applications, are assigned to one of three groups, depending on whether they are compliant to DCII requirements and whether they are able to interchange standard data with the DCII through some interoperability service. It is important to note that during their lifetimes applications may be different types at different times, according to their migration path. An application could start out as a Type I, then evolve to a Type II, and finally become a Type III.

If a DFAS application is compliant at the mandatory level with the end-state DCII specifications, it is denoted a Type III application. Example applications that might be Type III are pre-existing DFAS applications (e.g., GAFS-R) that have been modified to be fully compliant to DCII requirements, and newly developed applications that are built to be fully compliant from the start.

If not compliant with DCII end-state requirements, an application is either a Type I or Type II. If the application exchanges **standard transactional data** with the DCII, it is defined to be Type II. Examples of Type II applications include: partially migrated pre-existing applications whose transactional data are interchanged with standard transactional data in the DCII; COTS and GOTS products whose transactional data are exchanged with the DCII; and interim applications developed to maintain non-standard transactional data under DCII management until fully migrated into the DCD.

Finally, if a non-compliant application exchanges **non-standard transactional data** with the DCII, it is defined as Type I. Type I applications can be anything from a completely isolated, proprietary DFAS application that is not interfaced to the DCII in any way, to an application that is interfaced to the DCII and exchanges analysis and reporting data with the DCII. For example, Type I applications can include legacy DFAS applications, migrating applications, COTS and GOTS applications, or any other non-compliant DFAS applications that exchange non-standard transactional data with the DCII.

Section 4 discusses the three stage, phased migration strategy that DFAS is using to implement the OCE. Once completed, the OCE will provide:

- An integrated financial system compliant with rules, regulations, and guidelines established by Federal financial management regulations;
- Seamless integration of DFAS financial systems performing transaction processing and core accounting/reporting functions with Military Service and Defense Agency feeder systems performing program management functions, including acquisition, personnel, cost, property, inventory;
- Transaction processing functions, including invoices, funds transfer, and bills collection;
- Core accounting and reporting functions, including general ledger posting and financial statements preparation;
- Single, standard applications for each finance and accounting business area;
- A shared data environment for all applications;
- Automated feeder system interfaces;
- Single line of accounting (LOA) established by the initial transaction and stored in a shared data environment. All subsequent events linked to the initial transaction through the use of a unique code;
- Strategic planning, forecasting, qualitative and quantitative methods that identify and assess the risk of financial management functions;
- DoD financial management functions standardized across the department and reengineered for the shared information environment; and
- Global Edit Tables (GET) as a single source for financial data edits.

3.4 The Objective CFO Environment Components – Technical Perspective

The DFAS Information Management Policy and Instructional Guidance (DFAS 8000.1-R) establishes information management program policy and procedures to ensure that all DFAS financial systems are in compliance with DoD instructions and directives such as the Joint Technical Architecture (JTA). The JTA is "*A minimal set of rules governing the arrangement, interaction, and interdependence of the parts or elements of a system whose purpose is to ensure that a conformant system satisfies a specified set of requirements.*"

DFAS is implementing the DCII as the standards-based infrastructure for all DFAS financial system. From the perspective of a *Technical Architecture,* the DCII focuses on providing JTA-compliant functional capabilities to financial business areas within customer domains.

Using standards-based blocks of functional capability, DFAS is implementing the DCII to serve as:

- The foundation for the DFAS financial system infrastructure and
- A collection of common services, tools, procedures, hardware and software platforms, standards, policies, communication facilities and other integrated elements to provide shared, integrated access to corporate information assets in a compliant, maintainable, interoperable environment

The JTA compliant DCII will be built upon the DII COE. Other DCII components include:

- The DCD - central finance and accounting transaction database;
- The DCW - shared data warehouse for on-line analytical processing;
- The DFAS Corporate Repository (DCR) - central development repository;
- Corporate applications designed for direct interaction with the DCII shared data environment;
- A common processing environment that enables controlled, standard, and secure information exchange among DCII components and between the DCII and external systems;
- A shared data transaction environment that uses standard data as defined by the DDDS; and
- Electronic Commerce (EC) to facilitate the paperless flow of information.

The DCII will also provide the capabilities for Military Services and Defense Agencies' feeder systems to interface with multiple systems that interact directly with the shared data environment.

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4. MIGRATION CONCEPT

In formulating a feasible migration strategy, DFAS balanced complexities associated with operational requirements, funding, development, and client environments to establish a staged, incremental strategy with a high probability of success. History has shown that much smaller undertakings have failed in the Defense Department because they attempted to do too much within a single system concept. Therefore, the DFAS migration strategy incorporates stages and phases, within which core financial applications use a corporate database (i.e., DCD) to provide ever-increasing functional capabilities to customer domains.

The DFAS migration strategy is based on the agency's experience consolidating F&A systems, an assessment of the functional environment, studies and analyses of the requirements, and expert opinions from independent contractors. The migration strategy employs a "best fit" approach to select a system, useful in the near-term, to eliminate numerous legacy systems. This reduces the number of systems to be integrated into the target architecture to a manageable level, provides near-term savings, and reduces the number of systems that must be made Y2K and CFO compliant. Such a strategy was previously approved by the DBOF (now DWCF) Corporate Board to implement accounting systems for the customer domain business areas. In addition, the Financial Management Steering Committee for general fund accounting systems approved this incremental strategy.

The DFAS migration strategy reflects the fact that each Military Service has developed business practices and a financial management coding structure to capture, manage, and report financial information. Therefore, a single system could not readily accommodate every Service's existing architecture requirements. Currently, the Service-unique structure permeates the Service's financial management architecture, including programming, budget, logistics, personnel, and other management systems.

A feasibility assessment performed in February 1997 compared the financial management architecture, business practices, and data elements among the Services for general fund accounting. Assessment results showed the fundamental differences of accounting system requirements, based on the pre-existing Service-unique financial management system architecture. For example, the Army needed a financial management system that initiated source documents and tracked all fund availability within a single system. The Air Force already has migration initiatives to perform many of the financial management functions, including source document creation, but still requires a system capable of capturing accounting transaction results for events initiated in other systems.

The multi-system migration strategy adopted by DFAS recognizes the significant differences among existing systems and provides the least risk, cost, and disruptive approach to financial management community evolution. The DFAS migration strategy establishes clear, measurable, and achievable objectives at each stage of migration, and minimizes the risk of overextending limited functional and technical expertise and scarce resources. The migration stages ensure that DoD achieves CFO and Y2K compliance as quickly as possible, while at the same time continuing to move toward the OCE target environment.

4.1 Overview

The DFAS migration strategy incorporates both *stages*, to denote functional capability, and *phases*, to track progress over time. Figure 11 depicts three concurrent stages of functional capability to be implemented in the migration to an OCE target environment.

Briefly,

- Stage 1: Improves core financial systems by standardizing core processes and focusing on elimination of unnecessary systems. Identifies best-fit systems for quickest consolidation of systems and yields near term operational savings and improvements. Achieves Y2K compliance, complies with *Blue Book* requirements, and reduces the number of systems and interfaces to migrate to the OCE.
- Stage 2: Stands up the DCD and initial components of the DCII to provide the integrated database architecture and shared information environment for future applications. Implements standard transactions and creates the posting logic for the SGL. Maintains the crosswalks from legacy to BACC data to enable interfaces with existing environments; and

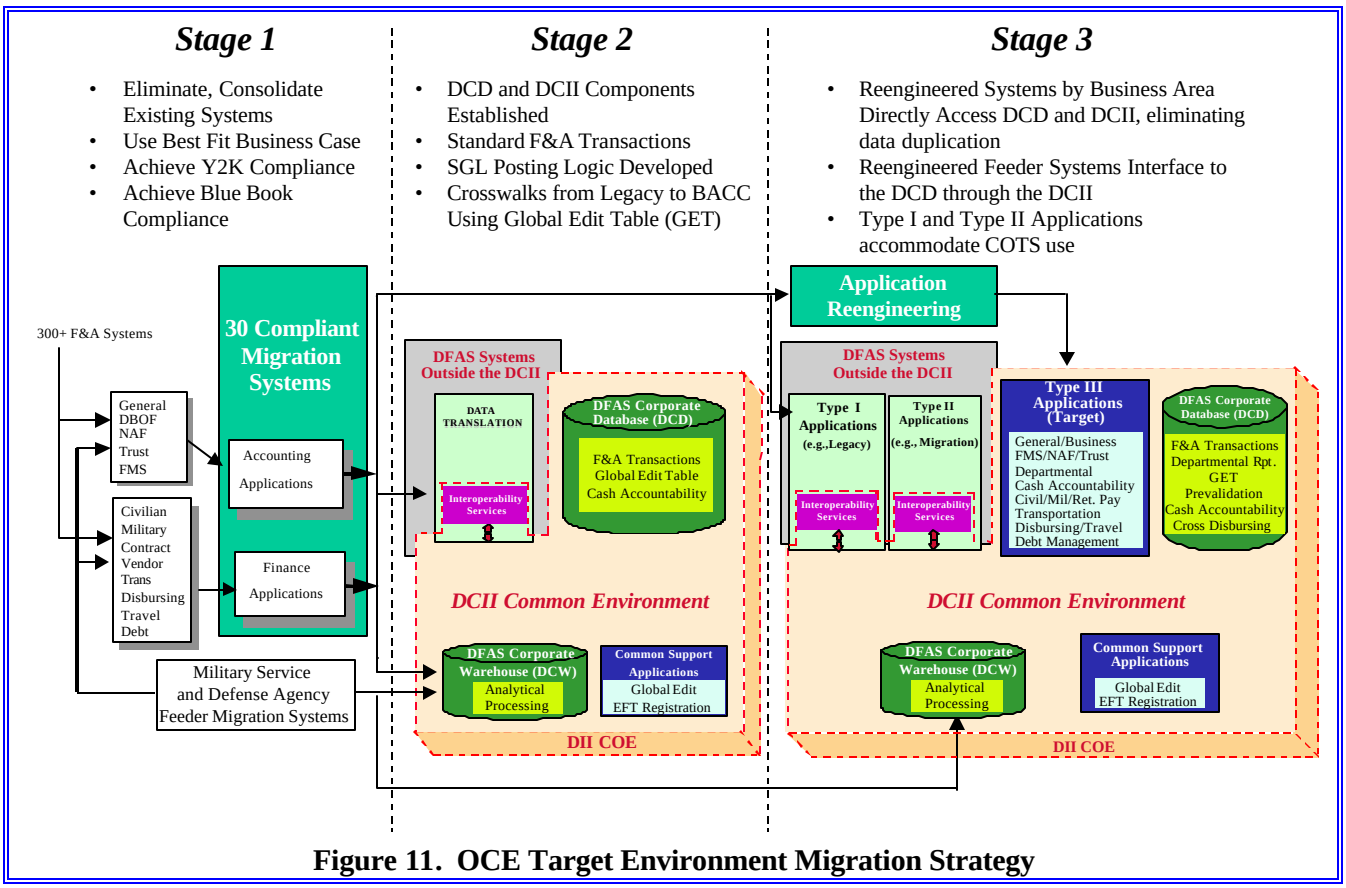


Figure 11. OCE Target Environment Migration Strategy

- Stage 3. Reengineers systems to directly interface with the DCD and the DCII. Integrates financial systems within the DoD business environment.

Table 1 in Section 2.2 identifies the 30 Stage 1 F&A migration systems that are core to the single unified architecture within the OCE.

DFAS established three phases, corresponding to the ten-year period addressed by this Strategic Plan, to further plan and highlight expected functional capabilities by timeframe. The three phases for the FY99 through FY08 period are:

- Near-term – FY99 and FY00;
- Mid-term – FY01 through FY04; and
- Long-term – FY05 through FY08.

As mentioned earlier, there is concurrence of activities among Stages 1 through 3. Figure 12 depicts the relative scheduling of Stage 1, 2, and 3 activities for the planned evolution to the OCE target environment. Within each timeframe, specific strategies and objectives described in Section 5 identify quantifiable achievement thresholds.

A companion document, the *DFAS Systems Integration and Implementation Plan*, provides intermediate level schedule information associated with each of the systems as they are consolidated and integrated into the OCE.

4.2 Near-Term (FY99 and FY00) Migration Activities

Near-term activities focus on: a) Stage 1, eliminating redundant systems, b) Stage 2, continuing integration of legacy financial systems and establishing the target architecture framework, and c) initiating the reengineering of selected financial systems into the OCE. Refer to the *DFAS Systems Integration and Implementation Plan (SIIP)* for specific scheduling of these activities. Of principal significance in this timeframe is the development of the DCD, implementation of basic DCII services, and data exchange via translation/crosswalk with the DCD. In the case of the Defense Procurement Payment System (DPPS), data will be exchanged with the DCD;

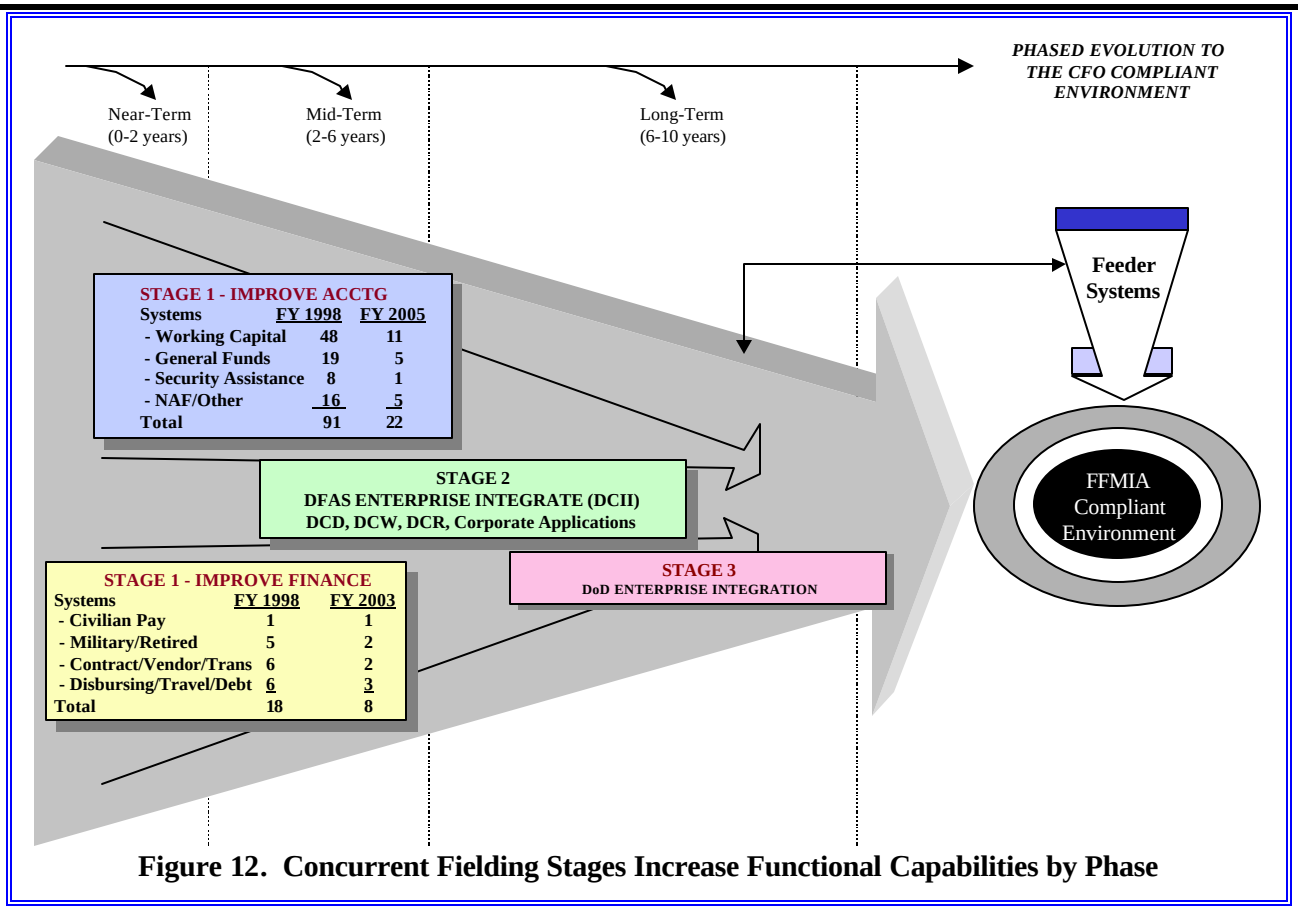


Figure 12. Concurrent Fielding Stages Increase Functional Capabilities by Phase

however, the preponderance of information will be in the corporate non-standard database and legacy system stores. Figure 13 is a depiction of the resulting system in FY00. As shown by the figure, most systems will operate outside of the DCII boundaries.

4.3 Mid-Term (FY01 – FY04) Migration Activities

Mid-term activities focus on: a) Stage 1, completing elimination of all redundant systems, b) Stage 2, completing integration of F&A systems and accelerating completion of the target architecture framework, and c) continuing the reengineering and introduction of selected F&A systems into the OCE. Refer to the *SIIP* document for specific scheduling of these activities. Significant in this timeframe is completion of the DCD, the initial operational capability (IOC) of many Type III applications, a DCW that is now on-line within the DCII, compliant common support applications, and numerous DCII compliant systems exchanging data directly with the DCD. However, there are non-DCII compliant systems still exchanging data using data translation services and the corporate non-standard database.

Figure 14 depicts the system at the end of FY04. Migration systems are operational, supporting their MSAs. As depicted in the figure, many user systems within customer domains will still operate outside of DCII boundaries, although the data that those systems use and generate is stored within the DCD and DCW.

4.4 Long-Term (FY05 – FY08) Migration Activities

Long-term activities focus on: a) Stage 2, completing DCII development and implementation activities and b) continuing the reengineering and introduction of selected F&A systems into the OCE. During this timeframe, most reengineered F&A systems complete their extension from IOC to full operational capability (FOC). Pre-planned improvements to selected F&A systems are at least initiated, with many completed. Completion of all reengineering and migration to the OCE is expected to occur beyond FY08. Refer to the *DFAS Systems Integration and Implementation Plan* document for specific scheduling of these activities. Figure 15 depicts the anticipated system at the end of FY08.

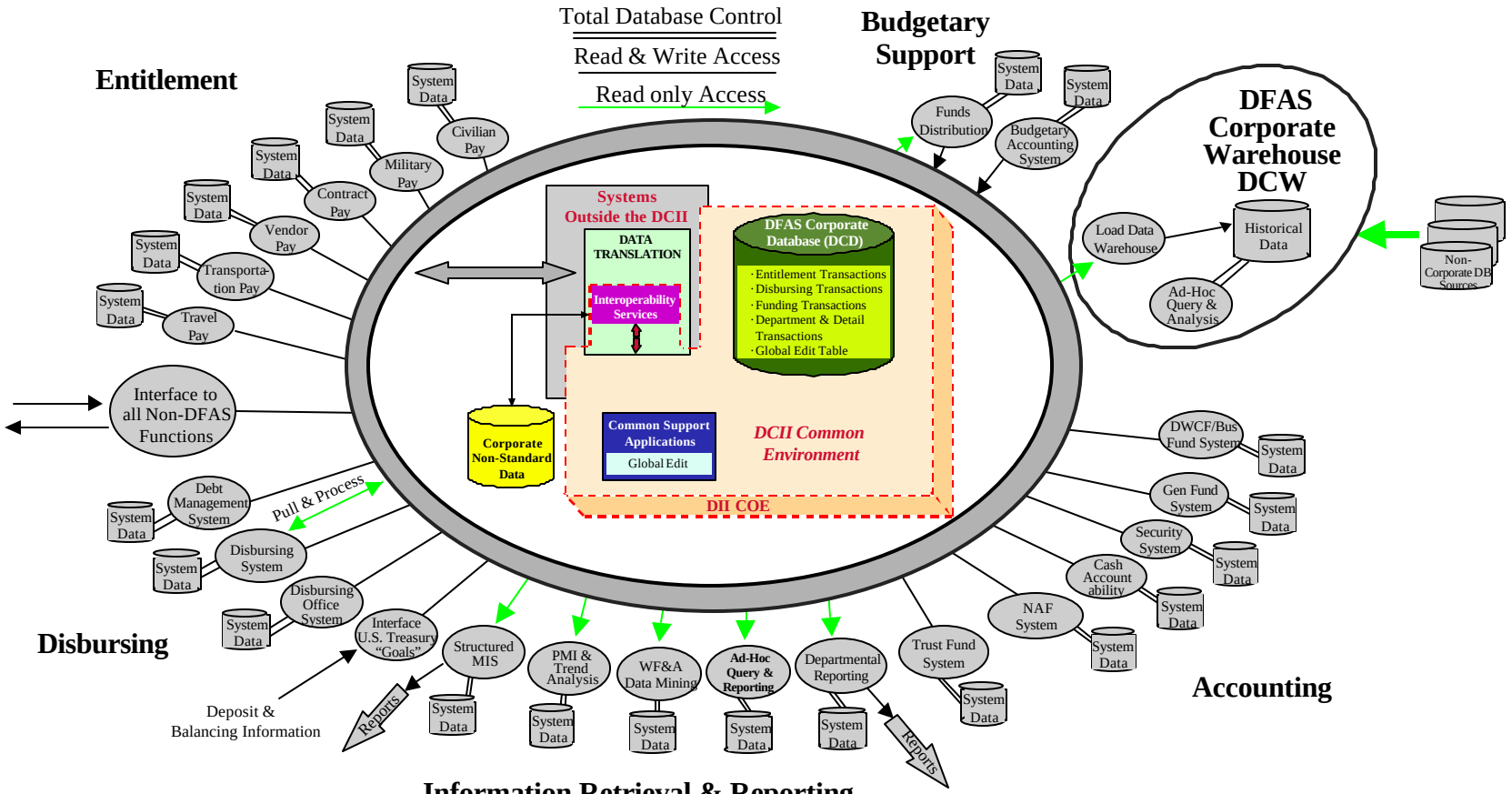


Figure 13. Near-Term (FY99 – FY00) End State

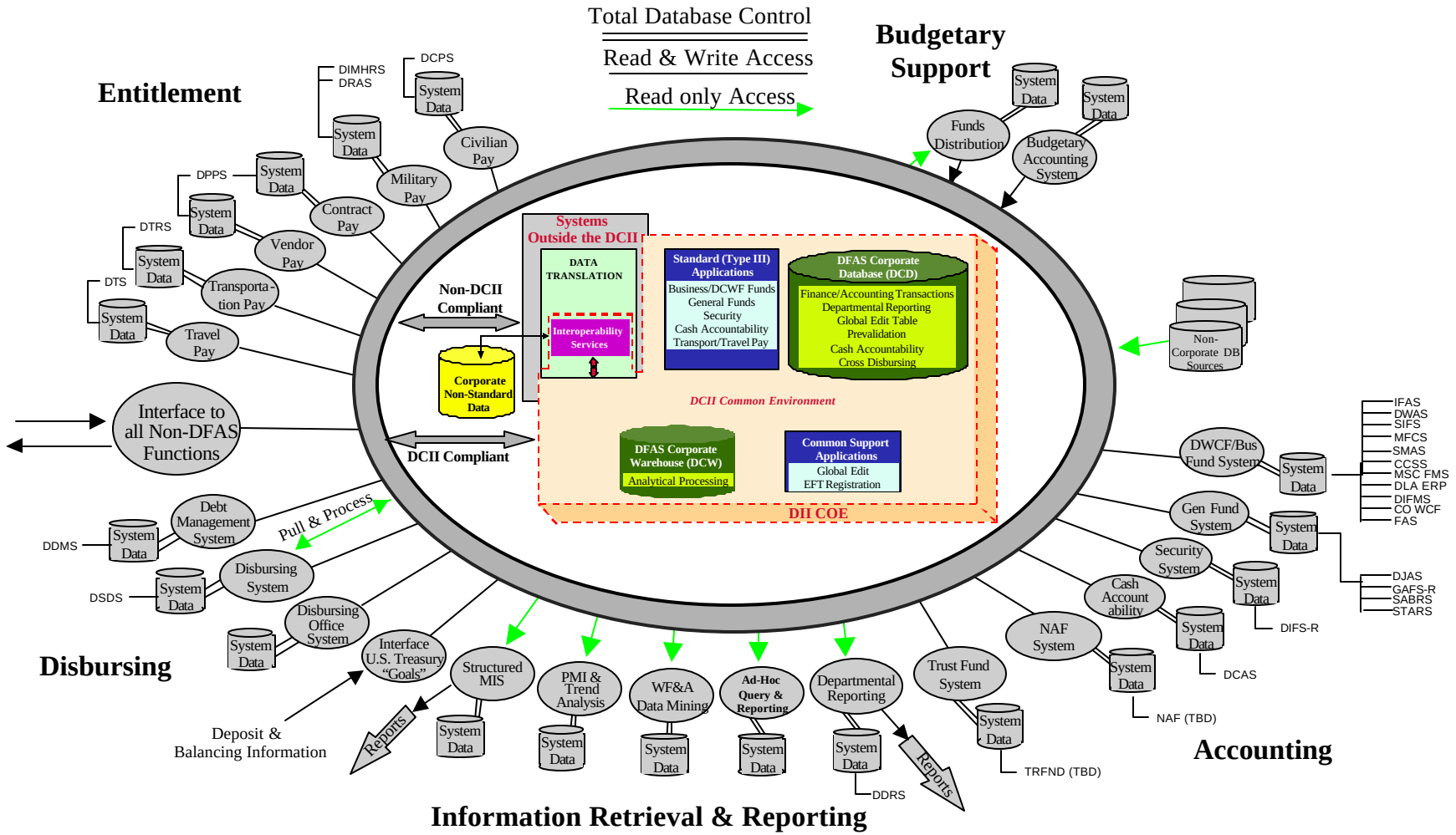


Figure 14. Mid-Term (FY01 – FY04) End State

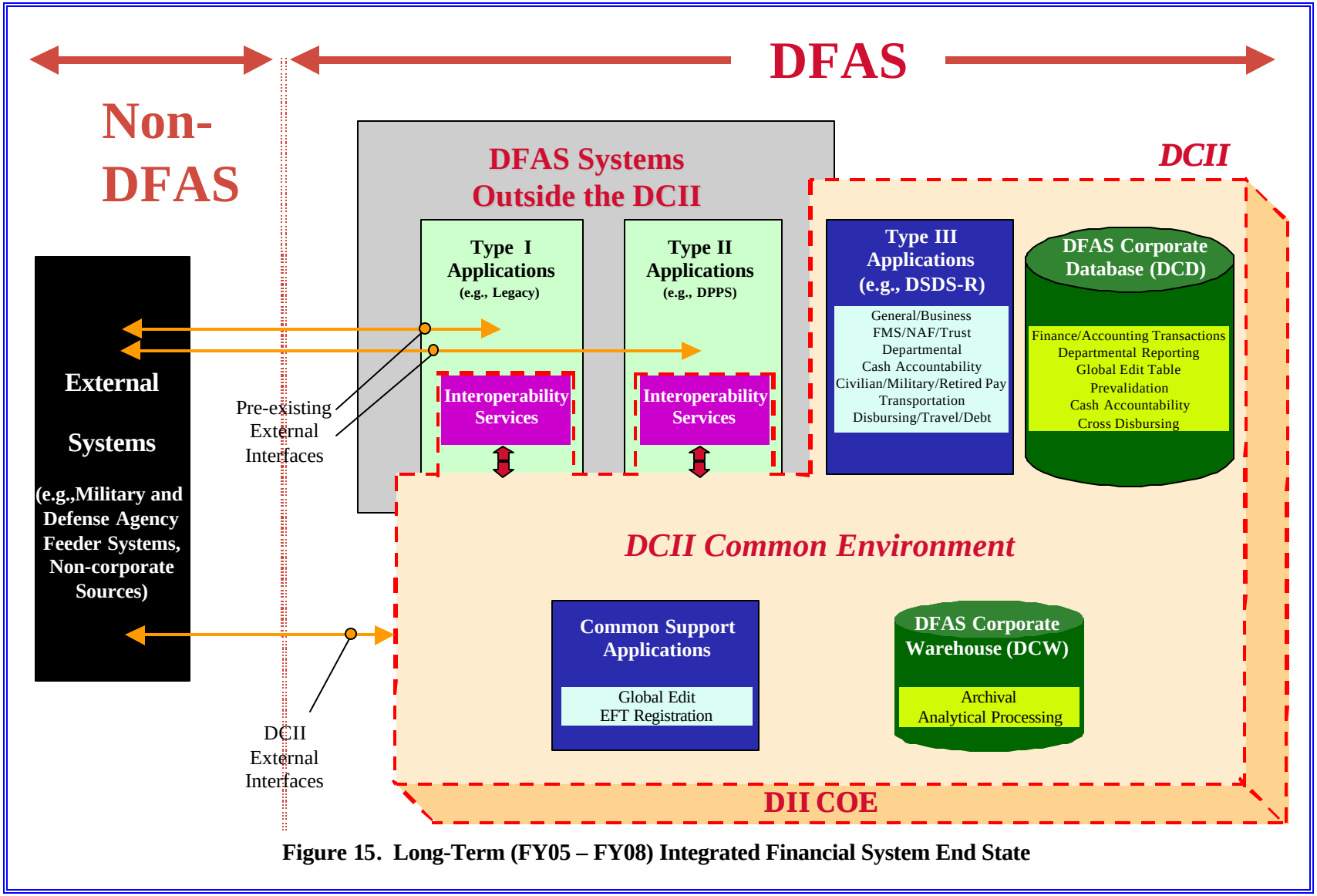


Figure 15. Long-Term (FY05 – FY08) Integrated Financial System End State

5. SYSTEM MIGRATION STRATEGIES

DFAS has identified seven top-level strategies for establishing and evolving the OCE, as well as migrating legacy F&A systems to the OCE. Migration of legacy F&A systems to the OCE is an evolutionary process that will occur over several years, guided by objectives and criteria developed for each of the strategies discussed in this Section. These strategies, identified in Figure 16, are described below:

Strategy #1, *Establish Target Architectures*. This strategy establishes the conceptual system architecture spanning the ten year strategic planning period, and detailed architectures for the near, mid, and long-terms. Architectures are needed that reflect the target environment at specific points in time (i.e., near-term, mid-term, and long-term).

Strategy #2, *Consolidate, Modernize, and Integrate DFAS Financial Systems*. This strategy implements financial system consolidation, modernization, and integration into the OCE. Migration occurs in stages and phases. This strategy plans and manages DFAS financial systems evolution to the OCE.

Strategy #3, *Manage Systems Evolution By Business Case.* This strategy puts investment analysis, based on industry and government best practices, at the center of the decision process. This strategy aims to achieve maximum ROI from the migration of DFAS financial systems to the OCE.

Strategy #4, *Reengineering Business Processes.* This strategy evolves DFAS business processes and practices to: (1) achieve CFO-compliance, (2) take advantage of modernized systems, (3) allow rapid evaluation and insertion of existing and emerging technologies and 4) eliminate redundant and unnecessary processes.

Strategy #5, *Promote Feeder Systems Evolution.* This strategy applies a proactive approach for Military Services and Defense Agencies' feeder systems evolution to: (1) achieve FFMIA compliance, (2) adopt data standards as defined by the DFADM, and (3) adopt DFAS defined standard transaction formats. Approximately 80% of data used by DoD F&A systems derive from feeder systems supporting DoD-wide program management activities.

Strategy #6, *Implement Shared Data Environment.* This strategy implements the objective shared data environment, the DCD and DCW components of the DCII. The *DFAS ITM Strategic Plan* addresses implementation of the DCII as a whole, including the DCR and infrastructure services. This strategy addresses the objective shared data environment essential for integrating financial systems and achieving FFMIA compliance.

Strategy #7, *Support Evolution of DoD Financial System Requirements, Policies, and Guidance*. This strategy supports USD (C) with evolving the requirements, policies, and guidance that drive DoD financial systems migration and operation. It ensures that implemented requirements, policies, and guidance are current and effective.

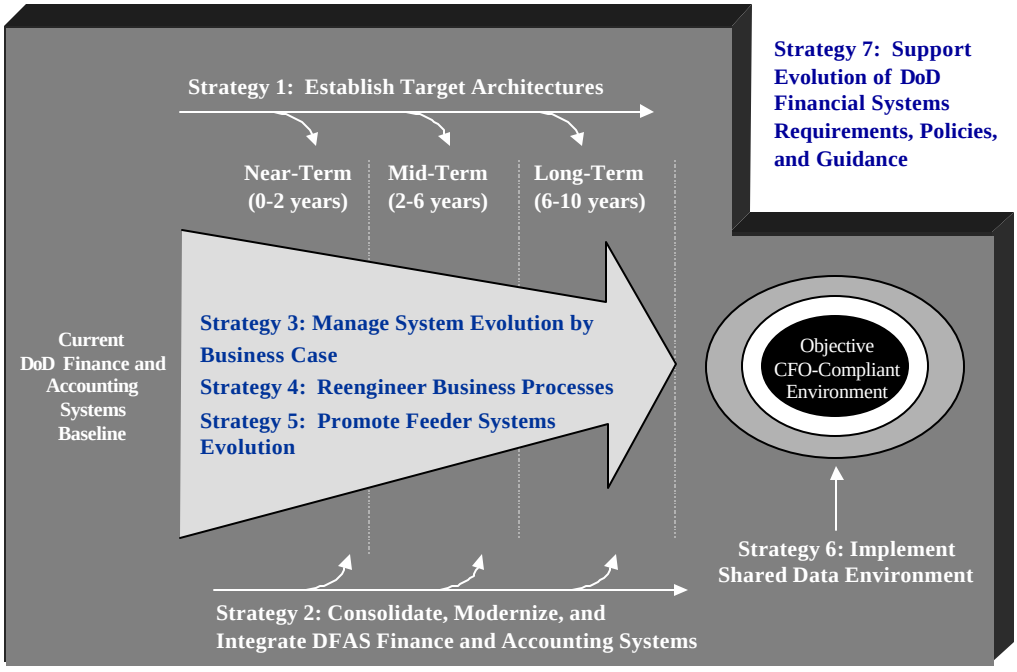


Figure 16. Seven Top-Level Migration Strategies

5.1 Strategy #1: Establish Target Architectures

To assist the evolution of large systems to standards-based solutions, the DoD defined an architecture framework that includes an interrelated set of operational, system, and technical architectures. These are depicted in Figure 17; the JTA provides an overview of this architecture framework. DFAS architectures will be developed based on the DoD architectural framework, incorporating JTA standards. This strategy addresses the establishment and evolution of the System Architecture. The *DFAS ITM Strategic Plan* addresses the Operational and Technical Architectures. Each architecture type is summarized below:

Operational Architecture. Defines the functional users' operational needs. It uses the knowledge of projected technological capabilities contained in the technical architecture and baseline capabilities contained in the system architecture. It provides the processing and information exchange requirements required to evolve the technical and systems architectures. The operational architecture is part of the functional component.

System Architecture. Defines the system capabilities required to: (1) satisfy the processing and information exchange requirements based on the operational architecture and (2) comply with the time-phased guidance based on the technical architecture. This architecture is part of the technical component.

Technical Architecture. Identifies standards and conventions that can be applied across functions and systems. Standards are selected and profiled based on the processing and information exchange requirements reflected in the operational architecture, baseline standards, and technology reflected in the System Architecture.

Since migration from the legacy environment to the OCE will occur over years, the System Architecture must encompass both legacy and objective environments, as well as provide a bridge that allows these environments to co-exist and evolve in harmony. Figure 18 provides a conceptual depiction of the System Architecture spanning the legacy and

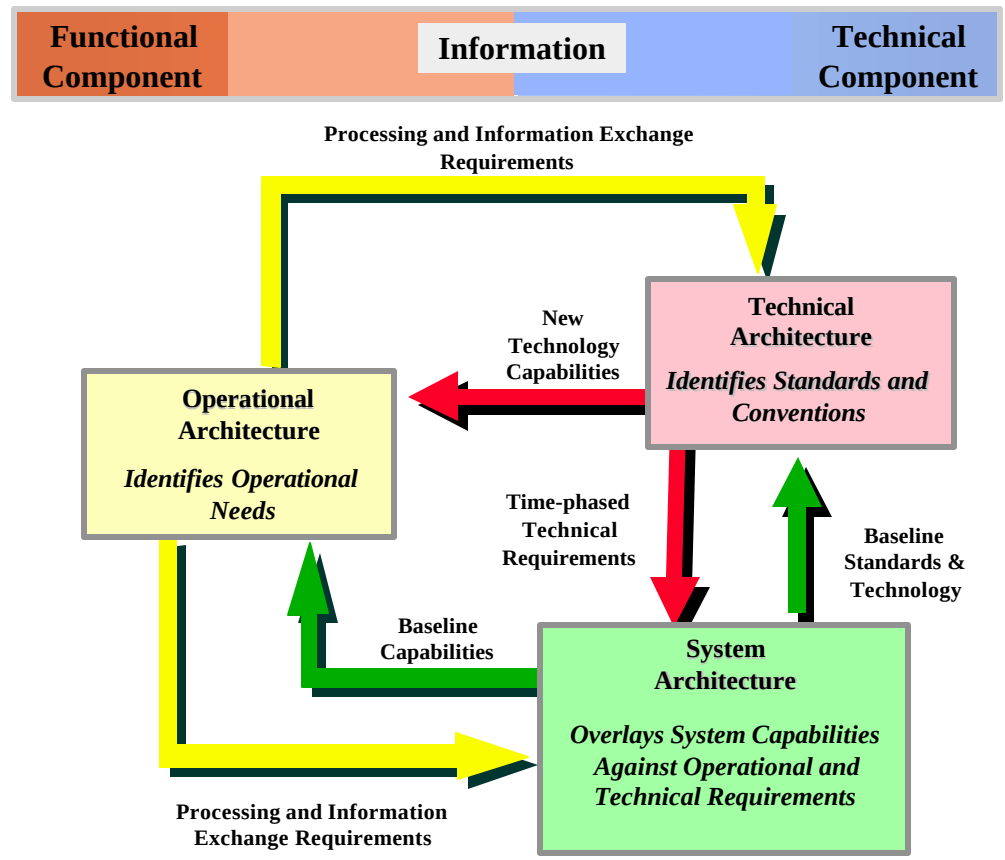


Figure 17. DoD Architecture Relationships

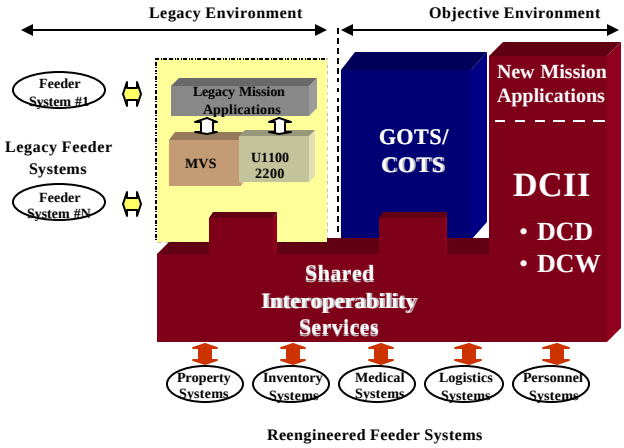


Figure 18. System Architecture Must Span Existing and New Environments

objective environments. The DCII is the objective information infrastructure for the OCE. It also contains the shared interoperability services that provide the bridge between the two environments.

Figure 19 depicts the architectural construct for the System Architecture. The Conceptual System Architecture provides a foundation for the detailed, time dependent system architectures, addressing the near, mid, and long-terms. The detailed, time dependent architectures provide stable migration targets at specific points in time. As indicated by the figure, the environments of DFAS migration systems are evolving in parallel with the OCE. The intent is for these environments to converge over time into a single, unified, shared, integrated, FFMIA-compliant environment. System architectures are required to force convergence and ensure progress through architectural compliance. Figure 19 identifies various aspects (i.e., system functions, system interfaces, information, migration systems environments, objective environment, infrastructure services, security, and geographical) to be addressed by the system architectures.

5.2 Strategy #2: Consolidate, Modernize, and Integrate F&A Systems

Over the next several years, DFAS financial systems will migrate to the OCE. As mentioned previously, the OCE builds upon the objective information infrastructure (i.e., DCII). The migration to the DCII must be planned and managed at multiple levels. Business rules, developed based on logic and

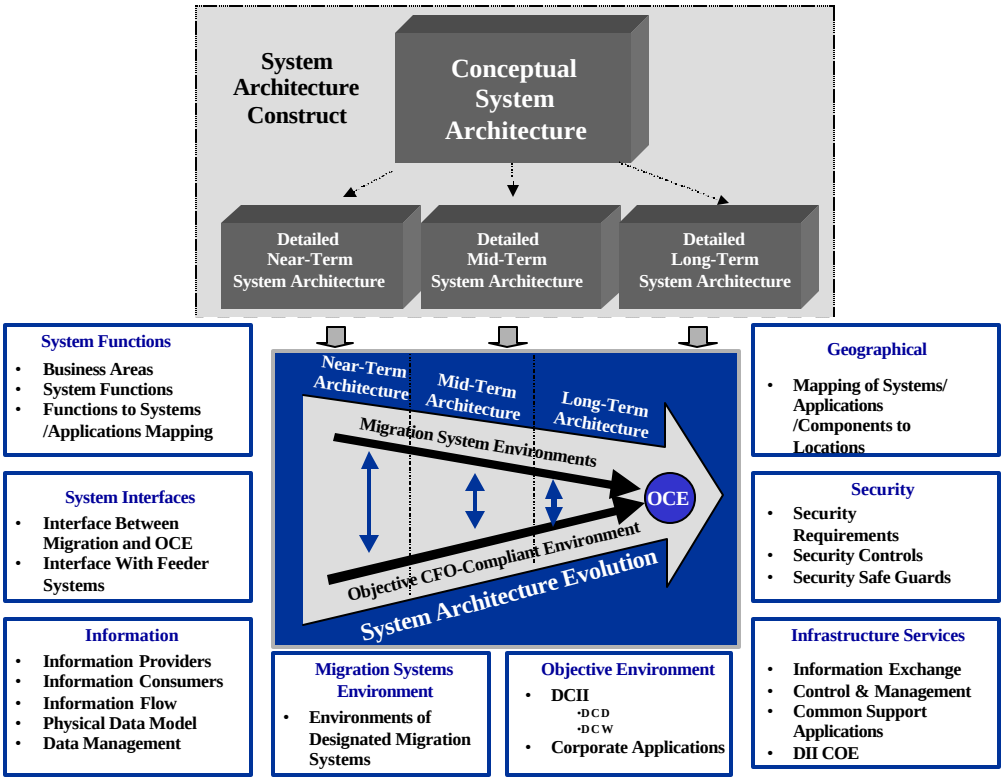


Figure 19. System Architecture Construct

experience, will be applied to generate a cohesive set of migration plans. These rules are the basis for a logical migration process that manages risk while making steady progress toward implementing the OCE. Some requirements that must be considered in the formulation of migration plans include: providing quality financial services to customers; satisfying legislative requirements to provide high quality FFMIA-compliant financial information and performance reporting; reducing financial system costs by consolidating, modernizing, and integrating F&A systems; providing the objective information infrastructure; obtaining sufficient ROI in current environments; validating the integrity and performance of the OCE before incorporating into mission critical operations, and managing change to provide sufficient stability within the customer domains.

Figure 20 depicts migration planning and management at multiple levels. *Enterprise Migration* plans and manages the establishment and evolution of the DCII. Over time, each MSA within finance and accounting will undergo *Systems Reengineering* for the DCII. A reengineered system will become either a DCII corporate application (i.e., Type III) or a COTS application (i.e., Type II/I), or a combination thereof, that interfaces with the DCII. The first system reengineered for the DCII is referred to as the **enabling** application (this could consist of multiple applications). The enabling application implements the core capabilities for the associated business area according to enterprise guidance (i.e., DFAAM, DFADM and Blue Book Requirements). Once core capabilities are implemented, validated, and operational, then other migration systems for the business area can be reengineered into the OCE. These reengineered applications will build upon the core capabilities provided by the enabling application. For example, GAFS-R is the enabling application for General Fund Accounting. Once GAFS-R is implemented, validated, and deployed, the other

- **Enterprise Migration**
  - DCII Management Council is responsible for overseeing enterprise migration
  - Enterprise level project teams manage enterprise initiatives
  - Implement enabling accounting systems first
  - Use enterprise functional requirements and models to guide enterprise migration
  - DFAS systems under-going reengineering will become corporate applications
  - Feeder system interfaces being reengineered will be redirected to the DCII/DCD
  - Implement interfaces to DFAS F&A systems that are required to support information needs of reengineer systems
- **Systems Reengineering**
  - Integration occurs on a system by system basis
  - Collaborative effort among enterprise level project teams and System Project Office
  - Non-Core migration systems are not candidates for enterprise integration until consolidation is completed (i.e., Type III applications)
  - Systems can interface with DCII/DCD (i.e., Type I and Type II applications) prior to completing consolidation as required to support core system information needs
  - Order of integration is based on business case (e.g., oldest first)
- **Systems Consolidation**
  - Project Offices plan and manage the consolidation for their related migration system(s)
  - Consolidation accommodates related feeder system interfaces

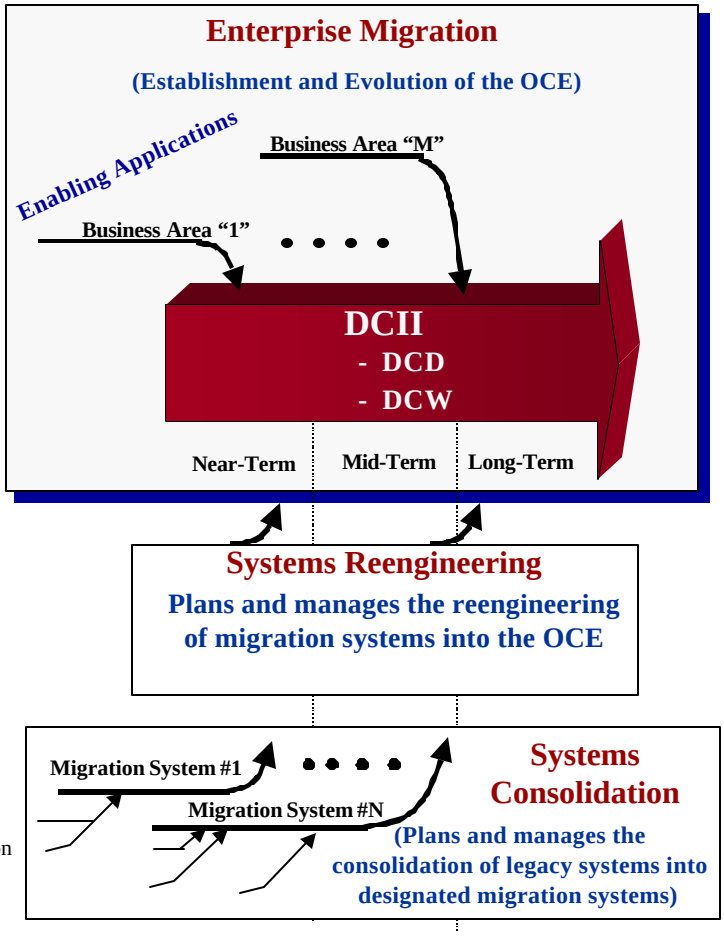


Figure 20. Levels of Migration

General Fund Accounting systems such as the Standard Accounting and Reporting System (STARS) can be reengineered for the DCII. As the enabling application, GAFS-R will provide a large portion of the required functionality for all DoD General Fund Accounting systems. When STARS is reengineered for the DCII, only STARS unique functionality will be provided by the STARS application.

Enterprise Migration. The DCII Management Council (DCIIMC), chaired by the DFAS Deputy Director, is responsible for managing enterprise migration to include formulating migration strategies as well as the integration and prioritization of enterprise-related initiatives. Since enterprise migration activities span the DFAS organization, Council members include key representatives from both Headquarters' and Center Directors' staffs. As the DCIIMC Agent, the Architecture Steering Group (ASG) serves as the DCII Manager. The ASG is co-chaired by the Deputy Director, Systems Integration (DFAS HQ/I) and the Deputy Director, Information and Technology (DFAS HQ/S). The ASG provides day-to-day management and oversight of DCII activities, providing regular reports and elevating unresolved senior executive issues to the DCIIMC.

Enterprise project teams from the migration systems (e.g., DCD, DCW, Defense Procurement Payment System (DPPS), GAFS-R) will be responsible for establishing and evolving the OCE. Reengineered DFAS systems will become **corporate applications**, with their data stored in the DCII shared data environment. Interfaces to Military Services and Defense Agencies' feeder systems and other DFAS financial systems required to support the data needs of the reengineered financial system must be implemented as part of the reengineering effort. Some application(s) such as DPPS will be implemented as COTS solutions that are Type II applications. These COTS application(s) will reside external to the DCII and exchange data with the DCD through crosswalks. The DCD will be the database of record for all transaction data used by reengineered applications.

Systems Reengineering. Reengineering migration systems into the OCE will occur on a system by system basis. Planning and management of the integration is a collaborative effort among the enterprise project teams and the Project Office (PO) of the system being reengineered. Migration systems are not candidates for reengineering into the OCE until their consolidation efforts are completed. Legacy and migration financial systems (i.e., Type I and Type II applications) can interface with the shared data environment prior to completing consolidation, if the interface is needed for enterprise operations. The order in which migration systems will be reengineered for the OCE is business case driven. To manage risk, the migration to the OCE must be phased. A key consideration in determining migration order is the need to obtain sufficient ROI from the existing environment before transitioning to the OCE. This implies that the older systems will transition to the OCE first, unless there is a business reason to change the order.

Systems Consolidation. Consolidation of legacy systems into designated migration systems is planned and managed by the PO for their respective migration system in collaboration with the PO(s) of the associated legacy systems. Migration systems will replace associated legacy systems when the migration system has consolidated the legacy systems' necessary functionality. Migration systems are then deployed into the user community supported by the legacy system.

Military Services and Defense Agencies Feeder System Interfaces. Feeder system interfaces associated with reengineered systems will either be reengineered to exchange standard data directly with the DCD, or exchange data with the DCD through crosswalks. Feeder system interfaces associated with legacy systems consolidated into migration systems that are not reengineered will be consolidated into the migration system along with the legacy system. Feeder systems that are DoD migration initiatives and interact with multiple DFAS financial systems will interface with the DCD for this purpose.

5.3 Migration Strategy #3: Manage Systems Evolution By Business Case

In today's budget constrained environment, economic analysis must be at the center of decision making processes. Managing systems evolution by business case requires full life cycle cost models for migrating systems that appropriately reflect system requirements, apply a sound economic analysis methodology, align with a realistic capital investment and operations budget, and use quantifiable outcome-based metrics, as depicted in Figure 21.

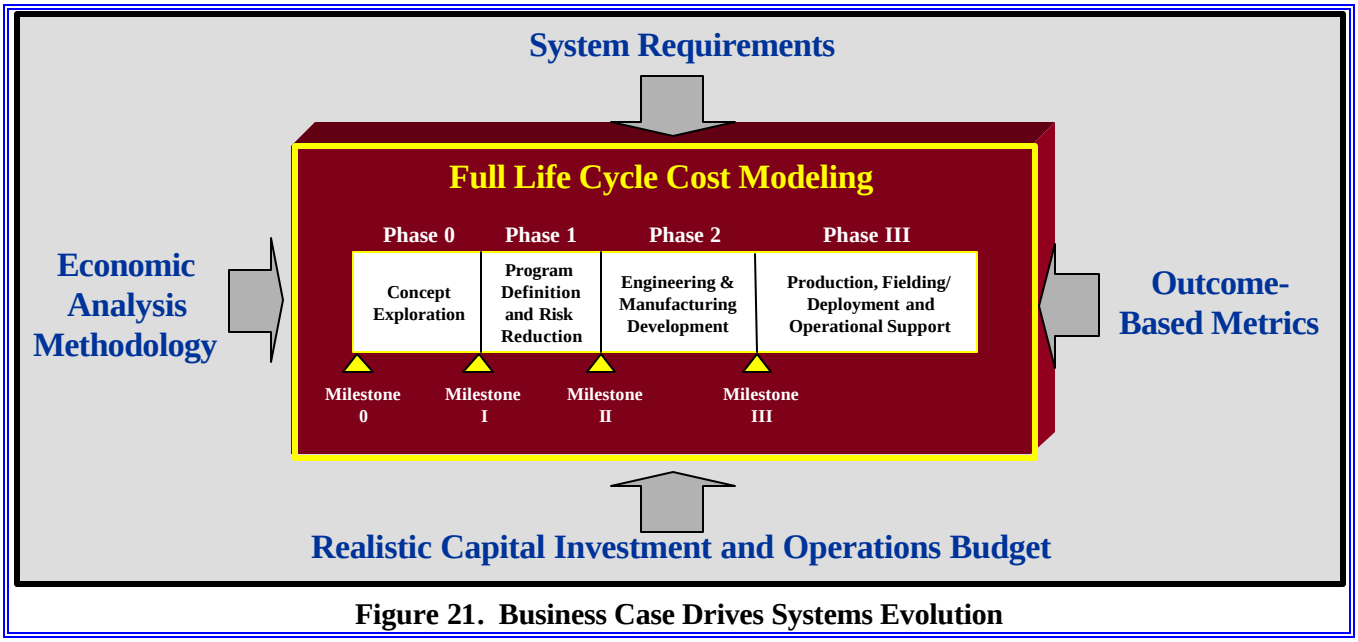


Figure 21. Business Case Drives Systems Evolution

Full Life Cycle Cost Model Full life cycle cost models will be developed for the DFAS migration systems. Each model should depict costs associated with all aspects of the acquisition life cycle. Figure 21 reflects the acquisition life cycle specified in DoD Directive 5000.1, *Defense Acquisition,* and 5000.2-R, *Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information Systems.*

Economic Analysis Methodology. A valid, consistent, and effective economic analysis methodology should be applied to ensure that: actual costs are appropriately reflected; reasonable alternatives are identified; cost and performance implications are assessed; ROI is quantified; and the proposed system migration approach is economically justified.

System Requirements. Based on mission need, a set of system requirements must be specified and prioritized. These requirements become the basis for conducting the economic analysis and determining ROI from a mission perspective.

Realistic Capital Investment and Operations Budget. Realistically, alternatives for evolving DoD F&A systems are constrained by the capital planning and budgeting process at the Agency, Department, and Federal levels. A realistic capital investment and operations budget is required to ensure that economic analyses result in a set of reasonable options which can be executed within the projected budget environment. In today's fiscal environment, the preferred approach involves options that can be incrementally funded over multiple years. However, the total capital investment and operations costs for the full system life cycle should be analyzed before undertaking major investments.

Outcome-Based Metrics. Meaningful measurements are required that relate investments to expected outcomes. Metrics provide a basis for ensuring achievable outcomes with incrementally applied funding. All migrating systems will define and validate metrics. These will set the foundation for milestone decisions throughout the migration process.

5.4 Migration Strategy #4: Reengineering Business Processes

Implementing financial management reform and achieving the OCE requires reengineering business processes within each DFAS MSA. This reengineering is required to: implement the needed financial management controls; obtain the required performance and efficiencies; achieve interoperability across functional areas and communities; and take advantage of technology advancements. Figure 22

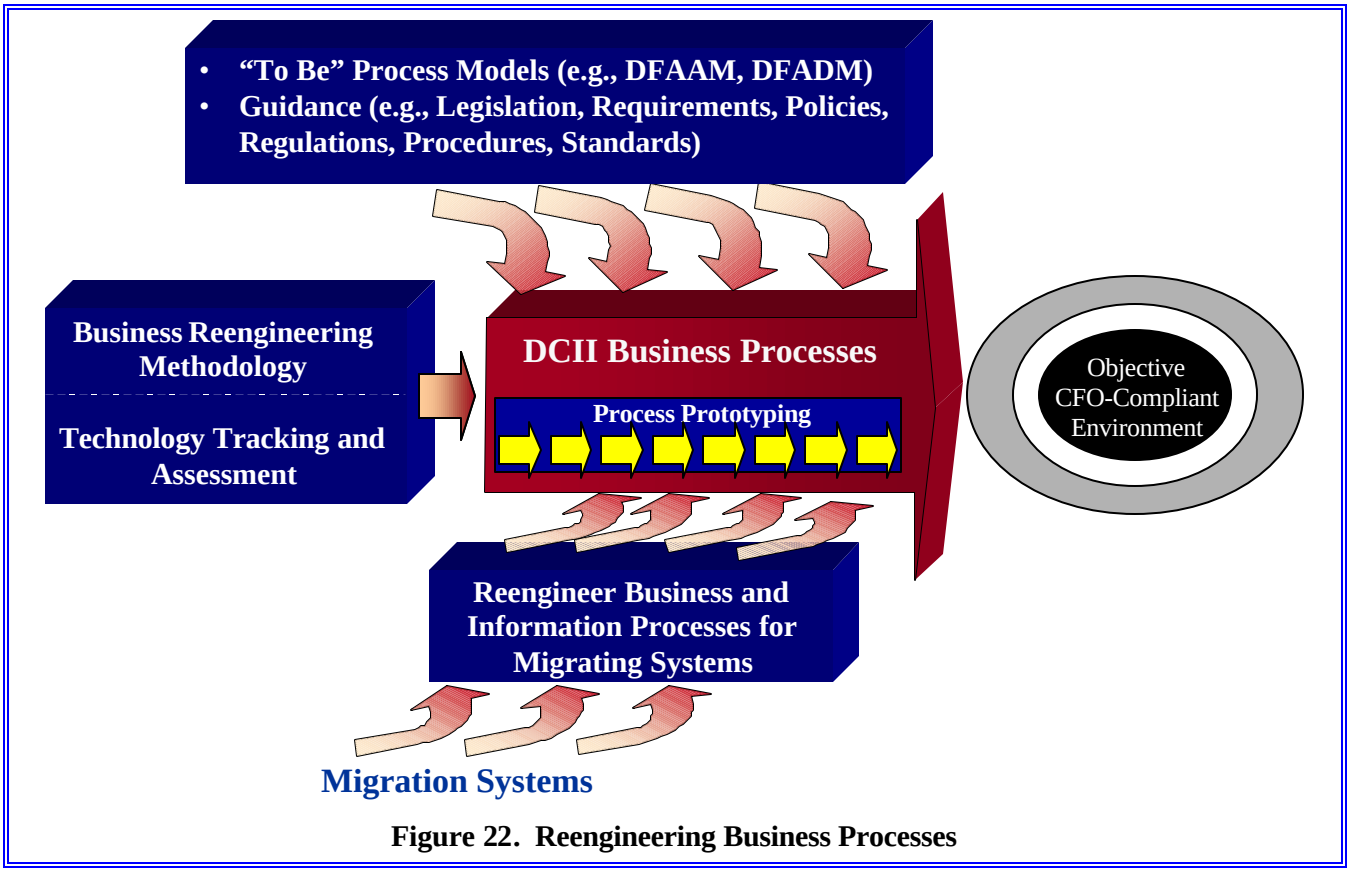


Figure 22. Reengineering Business Processes

conceptually depicts reengineering business processes for the OCE.

A standard business reengineering methodology will be established and applied to reengineering initiatives. A standard methodology is needed for consistency and the establishment of a standard tool suite for supporting analysis. Since a key benefit of reengineering business processes is to take advantage of technology advancements, technology tracking and assessment must be an integral part of the standard business reengineering methodology. This includes being actively involved with industry and government to influence the evolution of technology in areas critical to DFAS operations.

DFAS has conducted a number of studies, internally and by independent contractors, to reengineer processes and eliminate non-value added work. Some examples include: Vendor Pay and Travel BPR study, Military Pay BPR study, Reserve Component Military Pay BPR study, and the Accounting BPR study. All of these studies identified processes that needed change or improvement. These studies repeatedly advised that lack of system integration created non-value added processes such as redundant data entry into multiple systems, reconciliation processes required to identify missing and/or inaccurate data, manual off-line processes, and data manipulation to supplement inadequate systems. As a result, OCE development will maximize implementation of standard processes in a technically flexible, responsive environment.

When possible, business reengineering will be directed towards an enterprise solution. The DFAAM and other guidance that reflect the enterprise perspective (e.g., legislation, requirements, policies, regulations, procedures, and standards) will be used to direct business reengineering activities. The DFAAM and other guidance will evolve to maintain currency with the DFAS financial services mission.

Migration systems will be reengineered into the DCII according to the systems migration master schedule. As migration systems are reengineered, process prototypes will be implemented, tested, and refined before becoming fully operational. The reengineering

of business processes is itself an evolving process that will be continuously refined to achieve efficient improvements and maintain alignment with the DoD F&A mission.

5.5 Migration Strategy #5: Promote Feeder Systems Evolution

Approximately 80 percent of the data used by DFAS systems comes from Feeder Systems owned by Military Services and other DoD agencies. These feeder systems provide data needed to produce financial statements. As documented in the DoD FMIP, unreliable data from feeder systems is an issue that requires massive collaborative efforts among stakeholders to resolve.

Achieving the OCE – to include the production of auditable financial statements – is critically dependent on the ability of feeder systems to produce high quality data and execute CFO-compliant processes. In the past, feeder systems were designed to satisfy specific needs of individual customer communities. As feeder systems evolve in the future, it is imperative that they implement a standards-based, FFMIA-compliant architecture as depicted in Figure 23.

In synchronization with the migration of DFAS to the CFO-compliant DCII, the feeder systems must migrate to their objective CFO-compliant environments. As shown in Figure 23, feeder systems will migrate to their own objective environment, not necessarily the DCII. Since planning and managing feeder system migration are responsibilities of the owning organizations, DFAS must work in partnership with these organizations to promote evolution to the OCE. In the end, it is imperative that the DCII and the feeder systems objective environments be compatible, support CFO-compliant processes, and exchange data in standard data formats.

5.6 Migration Strategy #6: Implement Shared Data Environment

This strategy implements the shared data environment portion of the DCII. The overall DCII is addressed by *DFAS ITM Strategic Plan.* The *DFAS FS-SP* addresses the shared data portion of the DCII (Figure 24) composed of the DCD, DCW, standard fiscal code (SFC), and the GET. In addition, the DFAS shared data environment includes the corporate non-standard data area. The corporate non-standard data area facilitates the exchange of data between standard data in the DCD and non-standard data in the legacy environments. It also facilitates the exchange of data between the DCD and applications in the objective environment that use COTS solutions.

The DCD provides capability to enable shared, controlled storage and retrieval of DFAS standard transactional data. Transactional data are the current active values of finance, accounting, and other DFAS standard data elements. The DCD contains a relational database structure design supported by the standard entities and attributes in the DFADM. In addition to the database, the DCD contains closely

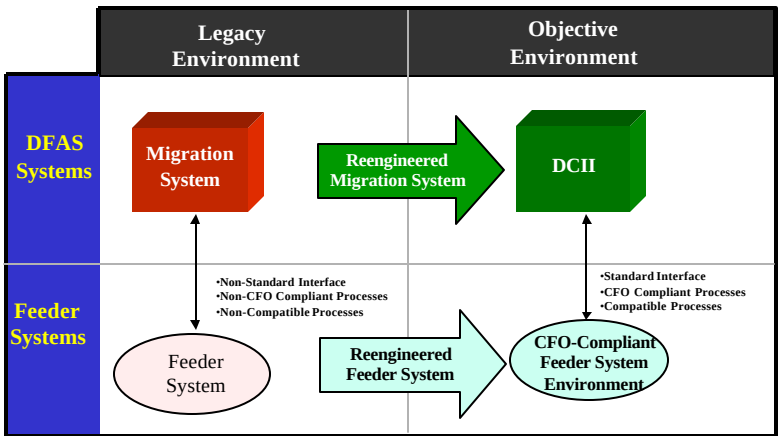


Figure 23. Feeder System Reengineering for CFO-Compliant Environment

associated applications that enable posting of standard transactions. It supports auditable tracking of all data back to the data source. The DCD provides a high degree of data integrity.

The SFC is a common line of accounting used to functionally interpret financial data. It establishes standard data elements and codes throughout DoD to be used for recording accounting events. The SFC represents a collaborative effort with the Services and Agencies to reach consensus on a common LOA that accommodates the broad needs of DoD. The SFC identifies a total of 49 data elements used to distribute funds and to identify for what purpose(s) the funds

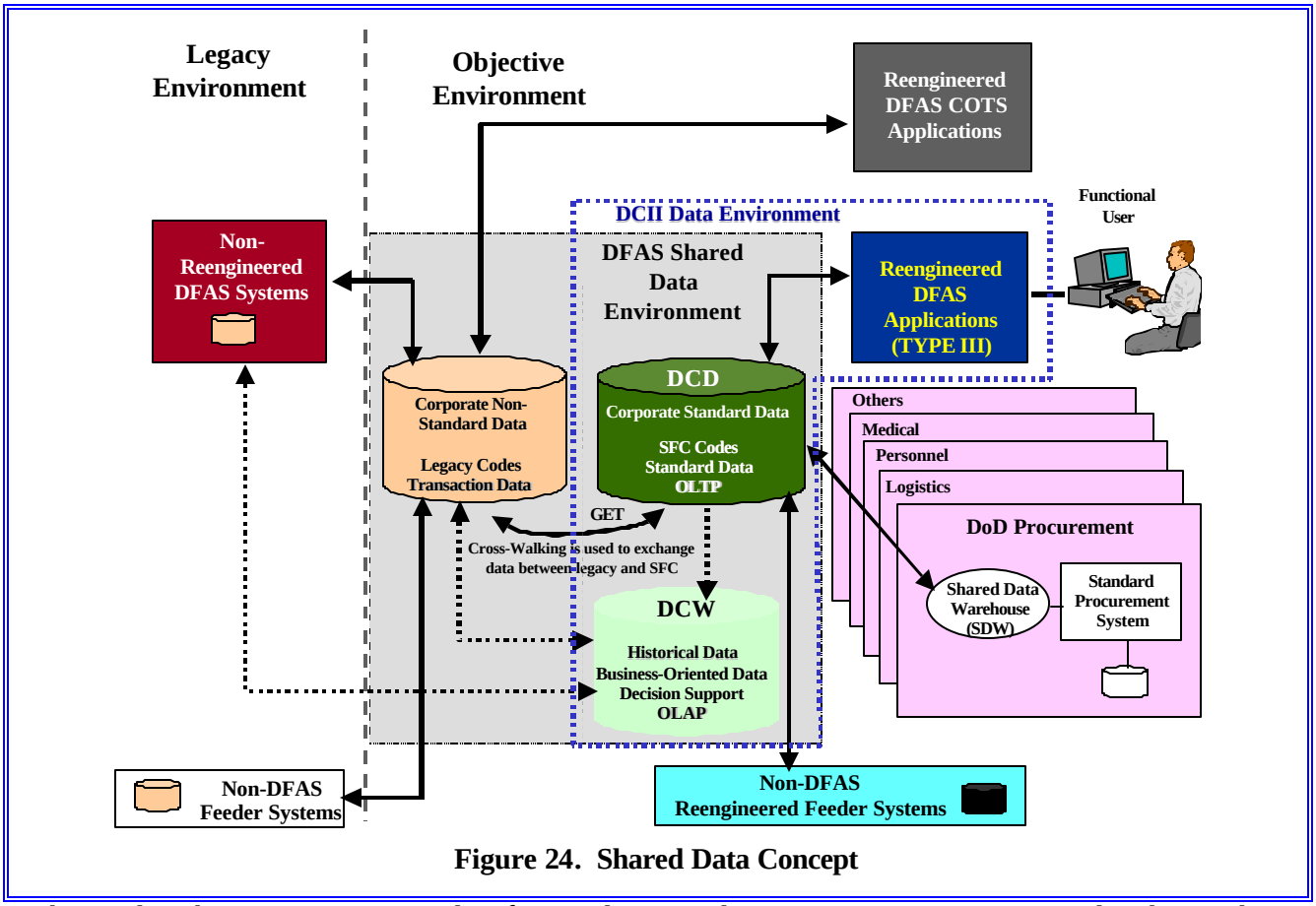


Figure 24. Shared Data Concept

can be used. There are 7 primary identifiers and 4 common data elements common to all accounting events. The primary identifiers are FAD number, Fund Account number, Commitment Reference number, Obligation Document number, Receiving Report numbers, and Disbursement Voucher number. The common data elements are transaction type, transaction amount, transaction quantity, and effective date. These data elements are used when a purchase is initiated, funds are committed, an obligation such as a contract has occurred, the receipt of goods and services has transpired, and a disbursement has been made. The SFC establishes a unique identifier associating the transaction to the LOA, thereby providing a user the structure in which a transaction can be tracked through its various stages of accounting without reentering the accounting data information.

The **GET** contains all the data items and valid values that are shared among DFAS financial systems and non-DFAS feeder systems. It provides a single source of valid data for legacy and migration systems. The GET is essential for interfacing the DCD with legacy and migration systems. It provides the mechanism that maintains data integrity and allows data exchange between DCD standard data and legacy data environments.

The **DCW** is a single, logical data store that manages DFAS information for analysis, reporting, and archival. The DCW is a business oriented, integrated, time-variant, and non-volatile collection of data that supports management analysis and decision making. It provides a robust, flexible, timely source of standard reports, reprints, and queries. In addition to the data store, the DCW includes end-user query and reporting tools. The DCW receives periodic snap-shots of data from the DCD. The DCW update cycle is driven by business needs and will vary across data domains.

As shown in Figure 24, legacy DFAS F&A systems interface to the DCD through the Corporate non-standard data area. DFAS systems that have been reengineered for the objective environment will exchange data directly with the DCD. However, feeder systems that remain in the legacy environment and are necessary to support reengineered DFAS

applications will interface with the DCD via the corporate non-standard data area. Alternatively, feeder systems reengineered for the objective environment will exchange data directly with the DCD. Also, other reengineered DoD functional areas (e.g., procurement, logistics, personnel) that maintain their own data environments will exchange data directly with the DCD using standard data interface processes. SFC and GET will be used to crosswalk data exchanged between the DCD, which contains corporate standard data, and corporate non-standard data areas.

The Defense Departmental Reporting System (DDRS) provides a single system to standardize financial data processing and reporting. DDRS will produce financial statements for each service and defense agency, and a consolidated DoD financial statement. It will provide the capability to retrieve detailed transaction information that supports summary level data reported on statements. This will facilitate satisfying the CFO requirement for auditable financial statements.

The Defense Cash Accountability System (DCAS) will help solve one of the Department's most critical problems – disconnects between obligations and disbursements which result in negative unliquidated obligations, unliquidated obligations and unmatched disbursements. DFAS performed an end-to-end process review to identify the causes and to create a systems solution within the constraints of the existing architecture. The problem begins with the entitlement function that does not capture all of the data needed by the accounting system, propagates to the disbursement and cash accountability functions, and surfaces as a problem in the accounting system. The DCAS initiative provides the capability to electronically capture and manipulate non-standard data into an acceptable format with standardized data and supplements the transaction with additional data required by the accounting system in order to match the disbursement to the obligation. This serves as a near-term capability until legacy entitlement and disbursing systems are replaced by standard systems that access shared, standard data. In addition, DFAS created two phases that focus the initial operational capability on solving cross disbursements during FY99 and providing Treasury reporting later when full operational capability is achieved.

5.7 Migration Strategy #7: Support Evolution of DoD Financial Management Systems Requirements, Policies, and Guidance

The demand for more timely, accurate, and precise information will grow significantly in the DoD's quest for information dominance in the 21st Century. Just as the 1990's produced legislation to support current Federal and DoD mission needs, the 2000's will also produce new and modified legislation to support evolving Federal and DoD mission needs. Figure 25 conceptually depicts the evolutionary process driving DoD financial management systems, categorized into four levels. The Global environment (Level 1) will continue to evolve driven by geopolitical instability, accelerating technological advancements, and fluctuating economies throughout the world. Federal and DoD priorities and mission needs (Level 2) will realign to accomplish the nation's strategic objectives within the global environment, including realignment of Department F&A priorities and mission needs. Requirements, policies, and guidance (Level 3) must be reshaped to appropriately reflect the Federal and DoD priorities and mission needs. This includes reshaping the requirements, policies, and guidance driving the evolution of DoD financial management systems (Level 4).

As the primary DoD financial management organization, DFAS will lead the establishment and evolution of requirements, policies, and guidance that drive consolidation, modernization, integration, and operation of DoD financial systems. This strategy supports the evolution of requirements, policies, and

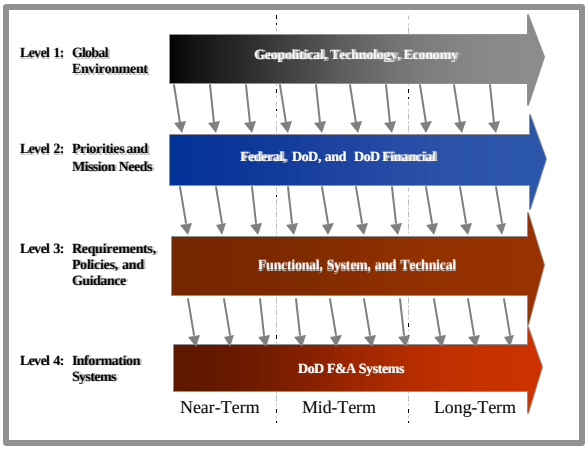


Figure 25. The Migration Of DoD Financial Management Systems Is An Evolutionary Process

guidance for DoD financial systems to ensure that evolution remains aligned with Federal and DoD mission needs and establishes a foundation for leveraging technology advancements. This strategy includes the following: (1) establishes and evolves the strategic direction for DFAS F&A systems, (2) integrates the strategic planning for DFAS F&A systems with the Agency's integrated management process, (3) establishes and evolves a system requirements baseline for each F&A business area, (4) establishes and evolves the policies and guidance required to implement the strategic direction for F&A systems and associated mission requirements, and (5) establishes and evolves the performance objectives and associated metrics required to assess the effectiveness of related policies and guidance.

Strategic Planning. This strategy includes supporting the planning required to establish and evolve the strategic direction for DoD financial management systems. This strategic direction will be reflected in future revisions of the *DFAS Strategic Plan.* It also includes conducting strategic planning as part of the Agency's integrated management process that itself synchronizes capital planning and budgeting, IT management, and project and operations management.

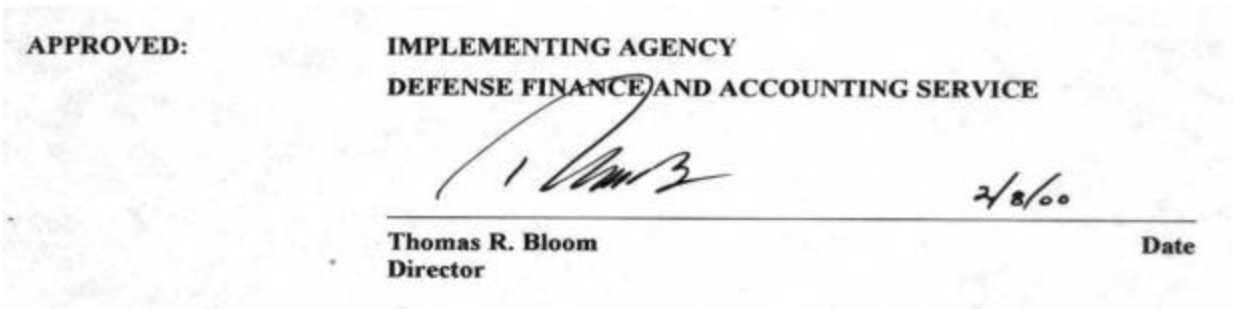
Mission Requirements Baseline. As previously mentioned in Migration Strategy #3, *Manage Systems Evolution by Business Case*, the definition of system requirements is an important aspect of performing economic analysis. Based on mission needs, this strategy establishes the system requirements baseline for each business area and evolves those requirements baselines, as necessary.

Policies and Guidance. In compliance with Federal and DoD top-level guidance**,** this strategy establishes and evolves the policies and guidance required for efficient and effective migration to the OCE. Examples of policies and guidance areas related to financial systems are: life cycle documentation, standards, configuration management, quality assurance, human system interface, interoperability, security, reliability, maintainability, availability, development, and acquisition.

Performance Objectives and Metrics. The Agency must align financial systems related initiatives with the strategic direction contained in this plan. Performance objectives should be defined for each initiative, including metrics to measure achievement of the associated performance objectives.

SUMMARY. This plan is designed to provide a steady course toward a target architecture that is reasonable and responsible. It addresses the immediate financial management reform issues facing the department while systematically moving into a more effective, efficient, and technologically advanced environment. This plan will be periodically reviewed and modified as necessary to incorporate the changes resulting from technological, legislation, or departmental direction.

Questions or comments regarding this plan should be referred to Bruce Johnson, (703) 607-0173, FAX (703) 607-2126, e-mail bruce.johnson@dfas.mil or Pat Lehtma, (703) 607-5013, e-mail pat.lehtma@dfas.mil .



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APPENDIX A. ACRONYMS

ASBP	Automated Strategic Business Plan
BACC	Budget Accounting Classification Code
BFMIP	Biennial Financial Management Improvement Plan
BPR	Business Process Reengineering
CCSS	Commodity Command Standard System
CDAs	Central Design Activities
CFO	Chief Financial Officer
CIO	Chief Information Officer
COE	Common Operating Environment
COTS	Commercial Off-the-Shelf
CO WCF	Columbus Working Capital Fund
CPBP	Capital Planning and Budgeting Process
DAS	Defense Accounting System
DBOF	Defense Business Operating Fund
DCAS	Defense Cash Accountability System
DCD	DFAS Corporate Database
DCPS	Defense Civilian Payroll System
DCW	DFAS Corporate Warehouse
DCII	DFAS Corporate Information Infrastructure
DCR	DFAS Corporate Repository
DDDS	Defense Data Dictionary System
DDMS	Defense Debt Management System
DDRS	Defense Departmental Reporting System
DIFMS	Defense Industrial Financial Management System
DIFS-R	Defense Integrated Financial System for FMS - Reengineered
DII	Defense Information Infrastructure
DIMHRS	Defense Integrated Military Human Resource System
DFAAM	DFAS Finance and Accounting Activity Model
DFADM	DFAS Finance and Accounting Data Model
DFAPM	DFAS Finance and Accounting Process Model
DFAS	Defense Finance and Accounting Service
DFAS HQ/I	DFAS System Integration Directorate
DFAS HQ/S	DFAS Information and Technology Directorate
DFAS FS-SP	DFAS Financial Systems Strategic Plan

DJAS	Defense Joint Accounting System
DLA ERP	Defense Logistics Agency Enterprise Resource Plan
DoD	Department of Defense
DPPS	Defense Procurement Payment System
DRAS	Defense Retiree and Annuitant Pay System
DSDS	Defense Standard Disbursing System
DTRS	Defense Transportation Payment System
DTS	Defense Travel System
DWAS	Defense Working Capital Accounting System
DWCF	Defense Working Capital Fund
EC	Electronic Commerce
EDM	Electronic Document Management
FAS	Fuel Automated System
FFMIA	Federal Financial Management Improvement Act
FMIP	Financial Management Improvement Plan
FOC	Full Operational Capability
FS	Feeder System
F&A	Finance and Accounting
GAFS-R	General Accounting and Finance System - Reengineered
GCCS	Global Command and Control System
GCSS	Global Combat Support System
GET	Global Edit Table
GMRA	Government Management Reform Act
GPRA	Government Performance and Results Act
IFAS	Industrial Fund Accounting System
IOC	Initial Operational Capability
ISO	Information Services Organization
ITMP	Information Technology Management Process
ITMRA	Information Technology Management Reform Act
JCS	Joint Chiefs of Staff
JTA	Joint Technical Architecture
LOA	Line of Accounting
MSC FMS	Military Sealift Command Financial Management System
NAF	Non-Appropriated Funds
OCE	Objective CFO-Compliant Environment
OMB	Office of Management and Budget

OPLOCs	Operating Locations
OPMP	Operations and Project Management
PBAS-FD	Program Budget Accounting System – Funds Distribution (PBAS-FD)
PMO	Program Management Office
PO	Project Office
POM	Program Objective Memorandum
PPBS	Planning, Programming, and Budgeting System
PP&E	Property, Plant and Equipment
ROI	Return on Investment
SABRS	Standard Accounting, Budgeting, and Reporting System
SECDEF	Secretary of Defense
SIFS	Standard Industrial Fund System
SFC	Standard Fiscal Code
SGL	Standard General Ledger
SMAS	Standard Material Accounting System
SMMP	Strategic Mission Management Process
STARS	Standard Accounting and Reporting System
TRFND	Trust Fund
USD	Under Secretary of Defense
WBS	Work Breakdown Structure
Y2K	Year 2000

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APPENDIX B. REFERENCES

The following are references used in the preparation of this document.

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APPENDIX C. SYSTEM MIGRATION STRATEGY OBJECTIVES

This appendix provides specific objectives associated with each of the system strategies discussed in Section 5 of this document.

C.1 Objectives for Migration Strategy 1 – Establish Target Architectures

Table 3 shows the near, mid, and long-term objectives for implementing Migration Strategy #1. The near-term objectives define the target System Architecture and use this architecture to guide OCE and systems migrations. The System Architecture must be implemented within the context of DoD and Federal guidance such as the *Framework for Federal Financial Management Systems*. Forums such as the DCII Management Council and the DCII Architecture Steering Group oversee the definition and implementation of the System Architecture, providing the necessary leadership and management. The DoD F&A systems have implemented the detailed near-term portion of System Architecture.

The mid-term objectives refine the System Architecture to reflect changes in strategic direction, technology advances, and evolving Federal and DoD guidance. All F&A systems that have been reengineered are compliant with the OCE portion of the architecture and implement the requirements as stated in *A Guide to Federal Requirements for Financial Management Systems* (referred to as the "The Blue Book").

The long-term objectives refine the architecture to reflect changes in strategic direction, technology advances, and evolving Federal and DoD guidance. All F&A systems have implemented the long-term CFO-Compliant system architecture.

Table 3. Establish Target Architectures

Near-Term Objectives (0 to 2 years)	Mid-Term Objectives (2 to 6 years)	Long-Term Objectives (6 to 10 years)
• Conceptual System Architecture defined	• Conceptual System Architecture refined	• Conceptual System Architecture refined
• Detailed near-architecture defined and implemented	• Detailed mid-architecture implemented	• Detailed long-architecture implemented
• Detailed mid-term architecture defined and associated implementation plans developed	• Detailed long-term architecture defined and associated implementation plans developed	• Detailed architecture for post long-term defined and associated implementation plans developed
• Models developed that reflect architectures	• System Architecture models updated	• System Architecture models updated
• Architecture Steering Group oversees architecture implementation across agency	• Architecture Steering Group oversees architecture implementation across agency	• Architecture Steering Group oversees architecture implementation across agency
• DFAS Systems Architecture applies to all DFAS F&A systems	• DFAS System Architecture applies to all DoD F&A systems	• Agency Systems Architecture applies to all Federal financial systems

C.2 Objectives for Migration Strategy #2 – Consolidate, Modernize, and Integrate DFAS Financial Systems

Table 4 identifies the near, mid, and long-term objectives for implementing Migration Strategy #2. Near-term objectives continue the consolidation of financial systems, develop the master plan that aligns systems migration activities at all levels of the enterprise, and implement the initial DCII. Initial DCII capabilities include the DCD for on-line transaction processing; the DCW for on-line analysis, archival, and reporting; and the BACC/GET for information translation between the DCD standard data environment and non-standard legacy environments through use of crosswalk interfaces. The near-term objectives also include beginning the reengineering of core systems such as GAFS-R for the DCII.

Mid-term objectives complete systems consolidation reaching 30 or fewer F&A systems by FY05, implement the required system interfaces to DFAS F&A systems and feeder systems, and complete reengineering of designated F&A systems for the OCE. Many DFAS systems and applications exchange data with the shared data environment either directly or through crosswalk interfaces. The DCII has evolved to become central to DFAS operations - functioning as the database of record for multiple DFAS financial applications.

The long-term objectives beyond FY08 migrate all DFAS F&A systems to the OCE. DFAS systems have transitioned to either, or a combination of, the following: (1) a set of reengineered applications within the DCII that are compliant with DoD functional guidance (i.e., CFO requirements) and technical guidance (i.e., JTA, DII COE) or (2) COTS application(s) that reside outside the DCII and exchange data with the DCII through Type I and/or Type II interfaces. The DCD and DCW represent the primary data environment for DFAS financial applications.

Table 4. Consolidate, Modernize, and Integrate DFAS Finance Systems

Near-Term Objectives (0 to 2 years)	Mid-Term Objectives (2 to 6 years)	Long-Term Objectives (6 to 10 years)
• **Continue F&A systems consolidation** • **Migration Master Plan, aligning activities across all migration management levels, are defined and followed** • **Establish initial DCII shared data environment (i.e., DCD and DCW)** • **Redirect proprietary system interfaces to the non-standard segment of the DCD** • **Provide the ability to transfer data between non-standard and standard DCD segments using BACC/GET for cross-walking** • **Start reengineering of core applications (e.g., GAFS-R)**	• **Systems consolidation completed and DFAS has fewer than 30 systems (by FY05)** • **Reengineered systems achieve CFO-compliance** • **DCII includes a robust shared data environment that is central to DFAS operations** • **Many core applications (e.g., GAFS-R, STARS) achieve enterprise integration IOC** • **Many proprietary system interfaces exchange data with the DCD standard segment through cross-walking** • **Some feeder system interfaces have been reengineered to exchange standard data with the DCD**	• **Migration to a single unified, CFO-compliant environment is completed** • **The DCII has achieved the objective information infrastructure goals for DoD finance and accounting** • **Most DFAS systems have been reengineered into DCII** • **All Military System and Defense Agency critical feeder system interfaces have been reengineered for standard data exchange with DCD**

C.3 Objectives for Migration Strategy #3 – Manage Systems Evolution by Business Case

Table 5 identifies the near, mid, and long-term objectives for implementing Migration Strategy #3. The near-term objectives define the economic analysis methodology to plan systems migration, establish system requirements baselines and initial life cycle cost models for migration systems, and complete cost analyses for designated migration systems.

The mid-term objectives refine the economic analysis process to be more efficient, automated, and integrated with cost models and decision support capabilities. The intent is to make economic analysis inherent to the decision making and migration planning process and to use automation for process facilitation. Actual costs and performance for migration systems are compared against project outcome-based metrics, and appropriate adjustment(s) applied.

Long-term objectives make economic analysis an integrated part of a robust decision support capability that uses advanced decision analysis techniques integrated with modeling and simulation capabilities. Artificial intelligence technologies have been incorporated to minimize time and manpower. Continuous automated feedback from operational systems is used to refine the economic analysis process to more accurately estimate projected outcomes and life cycle cost models.

Table 5. Managing Systems Evolution by Business Case

Near-Term Objectives (0 to 2 years)	Mid-Term Objectives (2 to 6 years)	Long-Term Objectives (6 to 10 years)
• Methodology for conducting economic analysis implemented	• Economic analysis methodology demonstrated, refined, and integrated with life cycle cost models, system requirements baselines, budgets, and decision support tools	• Economic analysis is an inherent part of the DFAS planning and management process
• System requirements for migration systems are defined and prioritized	• Life Cycle Cost models are refined and validated for all migration systems	• Economic analysis is part of an integrated, robust decision support capability using advanced decision analysis techniques
• Outcome-based performance metrics for migration systems are defined	• Performance metrics are collected and reported automatically	• Life Cycle Cost models are refined and validated for all migration systems
• Integrated capital investment and operations budget is used to plan systems migration	• Systems migration are analyzed relative to outcome-base metrics	• Performance metrics collection and reporting is integrated with DFAS's advanced decision support capabilities
• Full life cycle cost model for migration systems are developed and used to assess migration alternatives	• Economic analysis refined for systems under achieving expected performance levels	
• Economic analysis completed for migration systems and results incorporated in migration plans		

C.4 Objectives for Migration Strategy #4 – Reengineering Business Processes

Table 6 identifies the near, mid, and long-term objectives for implementing Migration Strategy #4. The near-term objectives: establish the business reengineering methodology including the development of models for critical F&A processes; assess the impact of top-level guidance (e.g., legislation, policies, requirements) on DFAS financial processes; and establish rapid prototyping capability for evaluating and refining reengineered business processes. The near-term objectives also implement a technology tracking and assessment process and reengineer the business processes for designated enabling systems (e.g., GAFS-R) in accordance with the DFAAM and DFADM.

The mid-term objectives integrate the standard business reengineering methodology with the process models and decision support capabilities; prototype business processes with potentially high ROI; and influence the evolution of critical technologies. The mid-term objectives also include reengineering all finance processes and some accounting process for the OCE.

The long-term objectives provide a mature, streamlined business reengineering process supported with a robust suite of reengineering tools. These tools will facilitate rapid prototyping of processes with a high ROI potential, influence top-level guidance for efficient and effective implementation; and support critical technologies associated with DFAS financial system requirements. The long-term objectives also include reengineering business processes for development of financial systems within the OCE.

Table 6. Reengineering Business Processes

Near-Term Objectives (0 to 2 years)	Mid-Term Objectives (2 to 6 years)	Long-Term Objectives (6 to 10 years)
• Business reengineering methodology implemented	• Business reengineering methodology integrated with business models and decision support capabilities	• Business reengineering methodology is mature and focused on continuous process improvement
• Business process and information models reflecting standard business processes are developed for critical processes	• Process improvement teams perform rapid prototyping of potentially high ROI processes	• Process improvement teams perform rapid prototyping as required to continue process improvement
• Implement formalized process to assess the impact of legislation, policy, and regulations	• The impacts of legislation, policy, and regulations are quantified and used as an integral part of decision making	• Legislation, policy, and regulations are streamlined for business processes
• Establish rapid prototyping capability for each business area	• DFAS is actively involved with government and industry to influence technology advancement in critical mission areas	• DFAS is directly influencing government and industry to accelerate the development of technology in critical mission areas
• Implement process for identifying, tracking, and assessing relevant technology	• Business processes reengineered for all finance and some accounting systems	• Business processes reengineered for all finance and accounting systems
• Reengineer business processes for initial systems integrating into DCII		

C.5 Objectives for Migration Strategy #5 – Promote Feeder Systems Evolution

Table 7 identifies the near, mid, and long-term objectives for implementing Migration Strategy #5. The near-term objectives stress identification of Military Services and Defense Agencies critical feeder system interfaces, establishing partnerships to manage critical feeder systems, collaborating with those organizations to analyze and plan migration of critical feeder systems, and defining end-to-end processes. The near-term objectives also include tracking and assessing the migration of critical feeder systems toward the OCE and enabling the direct exchange of standard data between the DCII and reengineered feeder systems.

The mid-term objectives extend near-term activities to all feeder systems. All critical feeder systems and some other feeder systems have migrated to the CFO-compliant environment, compatible and interoperable with the DCII.

The long-term objectives migrate all feeder systems to a CFO-compliant environment that is DCII compatible and interoperable.

Table 7. Promote Feeder Systems Evolution

Near-Term Objectives (0 to 2 years)	Mid-Term Objectives (2 to 6 years)	Long-Term Objectives (6 to 10 years)
• Critical Military Services and Defense Agencies feeder system interfaces and their relationships with DFAS Systems are identified • Partnerships with the organizations responsible for critical feeder systems are established • Migration plans for critical feeder systems have been obtained from appropriate organizations and analyzed • The end-to-end processes required to achieve CFO-compliance for critical feeder system interfaces are defined • Critical feeder systems are following migration plans toward the OCE developed though collaborative efforts between DFAS and the the responsible organizations • Reengineered feeder systems exchange information directly with shared data environment (i.e., DCD)	• All Military Services and Defense Agencies feeder system interfaces and their relationship with DFAS Systems are identified • Partnerships with the organizations responsible for all feeder systems are established • Migration plans for all feeder systems have been analyzed • The end-to-end processes required to achieve FFMIA compliance for all feeder system interfaces are defined • All feeder systems are following migration plans toward the OCE developed though collaborative efforts between DFAS and the the responsible organizations • Many feeder systems and all critical feeder systems are FFMIA compliant and have been reengineered to exchange information directly with the shared data environment (i.e., DCD)	• All Military Services and Defense Agencies feeder systems are following migration plans toward the OCE developed though collaborative efforts between DFAS and the the responsible organizations • All feeder systems have implemented FFMIA Compliant processes • Most feeder systems have been reengineered to exchange information directly with the shared data environment (i.e., DCD)

C.6 Objectives for Migration Strategy #6 – Implement Shared Data Environment

Table 8 identifies the near, mid, and long-term objectives for implementing Migration Strategy #6. The near-term objectives define the shared data environment for the OCE, establish and validate the process for reengineering legacy data into the shared data environment, plan and initiate the reengineering legacy data into the shared data environment, and implement the DCD and DCW initial operational capabilities. In addition, the near-term objectives include redirecting designated system interfaces into the shared data environment.

The mid-term objectives make the functionality provided by the DCD and DCW central to DFAS financial system operations, implement interfaces between the DCD and designated systems (including critical feeder systems), establish some corporate Type III applications that interact directly with the DCD to perform F&A operations, and pre-validate entitlements for all F&A systems through the DCD.

The long-term objectives establish the DCD and DCW as the databases of record for DFAS financial system operations; evolve the DFAS shared data environment into an integral part of Federal and DoD enterprises supporting CFO-compliant, compatible, interoperable, standard data exchange; and complete legacy data reengineering into the shared data environment.

Table 8. Implement Shared Data Environment

Near-Term Objectives (0 to 2 years)	Mid-Term Objectives (2 to 6 years)	Long-Term Objectives (6 to 10 years)
• The objective shared information environment is Defined • The process for reengineering data and applications has been established and validated • Implementation planning for the shared information environment is complete and being followed • DCD and DCW have achieved initial operational capabilities • Information is shared between the DCD and designated legacy systems through cross-walking legacy data to BACC and other standard data elements • Interfaces interconnecting procurement, contractor/vendor pay, entitlement, travel entitlement, disbursing, and accounting systems are redirected to shared information environment • Data reengineering efforts for designated systems are underway	• DCD and DCW have evolved to become central to DFAS finance and accounting operations • Information is shared between the DCD and all non-reengineered migration systems and non-reengineered critical feeder systems through cross-walking legacy data to BACC and other standard data elements • Many of the DFAS migration systems have started the reengineering of applications for the objective environment • Some feeder systems have been reengineered to exchange information directly with the DCD • Pre-validation between all applicable entitlement and accounting systems is accomplished through the DCD	• DCD and DCW are the database of record for DFAS finance and accounting operations • The DFAS data environment is an integral component of the DoD SHADE environment using standard data and standard business rules • The reengineering of DFAS migration systems for the objective environment is complete • Critical feeder systems have been reengineered to exchange information directly with the DCD • The objective shared information environment provides a fully CFO-compliant environment for DFAS finance and accounting operations

C.7 Objectives for Migration Strategy #7 – Support Evolution of DoD Financial Management System Requirements, Policies, and Guidance

Table 9 identifies the near, mid, and long-term objectives for implementing Migration Strategy #7. Near-term objectives define the strategic direction for DoD financial systems; define requirements, policies, and guidance needed to implement the strategic direction for DoD financial systems; integrate strategic planning for DoD financial systems with other Agency strategic planning processes; incorporate performance objectives into financial systems-related initiatives; and assess the progress toward accomplishing strategic objectives. Another near-term objective includes implementing the collaborative process for coordinating and refining strategic direction, requirements, policies, and guidance with stakeholder throughout the DoD and DFAS financial communities.

Mid-term objectives update the strategic direction for DoD financial systems; integrate strategic planning for DoD financial systems with other DoD strategic planning processes; ensure that requirements, policies, and guidance for DoD F&A systems are current and being implemented; and ensure strategic direction, requirements, policies, and guidance are coordinated with stakeholders throughout the Federal, DoD, and DFAS financial communities.

The long-term objectives achieve the strategic objectives in the DoD FMIP; integrate strategic planning for DoD financial systems with other Federal strategic planning processes; and implement a robust process for planning and managing the effectiveness of requirements, policies, and guidance toward accomplishment of the DoD financial management system strategic direction.

Table 9. Support Evolution of DoD Financial Management System Requirements, Policies, and Guidance

Near-Term Objectives (0 to 2 years)	Mid-Term Objectives (2 to 6 years)	Long-Term Objectives (6 to 10 years)
• The DFAS Financial Systems Strategic Plan is approved and being implemented by DFAS	• The DFAS Financial Systems Strategic Plan is updated and being implemented by all DoD	• Implementation of DFAS Financial Systems Strategic Plan is completed
• DFAS financial systems strategic planning is integrated with the Agency's integrated management process	• DFAS financial systems strategic planning is integrated with DoD strategic planning	• DFAS financial systems strategic planning is integrated with DoD and Federal strategic planning
• The requirements, policies, and guidance for DFAS financial systems are defined and understood by stakeholders	• The requirements, policies, and guidance for DFAS financial systems have been updated and are being implemented	• The requirements, policies, and guidance for DFAS financial systems have been updated and are being implemented
• Performance objectives are defined and being used to measure the progress of evolving systems	• Performance objectives are updated and associated metrics are being automatically collect and used to measure the progress of evolving systems	• Performance objectives are updated and integrated with a robust planning and execution management process
• Process for coordinating requirements, policies, and guidance across DoD financial community is defined and implemented	• Process for coordinating requirements, policies, and guidance across DoD and Federal financial community is defined and implemented	• A robust integrated process supported by automated tools is used to coordinate requirements, policies, and guidance across DoD and Federal financial community

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